

TEN YEAR PLAN
AND
Solution of India's
Middle Class
Unemployment

By
J. N. GHOSH
Managing Director,
Dominion Insurance Company, Ltd.

FIRST EDITION

CALCUTTA :
CALCUTTA PHOTOTYPE CO.,
Crooked Lane.

PUBLISHED BY
THE CALCUTTA PHOTOTYPE CO.
AND
PRINTED BY
A. P. BHARGAVA
AT CALCUTTA PHOTOTYPE CO'S PRESS,
1, CROOKED LANE, CALCUTTA.



This book is humbly dedicated
in respectful memory
of

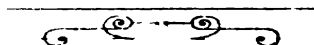
My Loving Father

Late JOGESWAR GHOSH

who in his mortal life as well as

LIFE AFTER DEATH

always takes a loving and paternal
care of all my humble activities



P R E F A C E.

THE increase of the National wealth and there-
with the increase of the purchasing power of the
people are the bedrock on which depends not only
the solution of the vital economic problems of
India and withal the solution of middle class
unemployment but that of her political problems
too. The Montford reforms could not create a
good impression in the country for perpetual want
of funds in the Nation Building departments ;
the funds would not be forthcoming on mere grant-
ing of autonomy in the provinces as per recom-
mendations of the White Paper. Moreover if the
proposed Federation Scheme materialises, feder-
ation finance will be the most difficult problem in
Federated India. India is one of those unfortunate
countries in the world where her economic ship is
tossing over the billows in the midst of a high sea
without chart and compass and we may say, with
her engine break-down.

In an age where all the advanced nations of the
world are increasing their national wealth through
the use of up-to-date machineries and in a country
where its glorious Industries such as shipping,

muslin, silk and iron flourishing for more than 30 centuries and hand made gunny industry of recent date were ruined through want of adaptation of the modern method and machineries which followed on the invention of the steam power in England, it is a Himalayan blunder to preach through the Congress the exploded anti-mill doctrine of socialism. Congress is a political organisation and it would have been infinitely better for India, if it would have confined its activities to political movements only. In 1921 the Congress of India was out to remove 'slave mentality' but at the same time it slavishly imitated and preached the exploded anti-mill theory of Karl Marx. Soviet Russia is an out and out disciple of Karl Marx; but they have discarded this anti-mill theory and have set up huge up-to-date machineries "to overtake and outstrip the capitalist nations" of the world, in their industrial products through her "Five Year Plan" started in 1928 and completed in 1933. The success already achieved by Soviet Russia under Five Year Plan has already created a thrill of consternation amongst the capitalist nations. The folly that India committed one hundred years ago in not adopting the up-to-date method at the cost of her shipping trade, muslin, silk, iron and gunny trades was repeated with the

sanction of present Congress. While India is entertained with the blessed "Music of Charka" to lull her, perhaps, to eternal sleep by the Congress—the Indian disciple of Karl Marx, his Soviet disciple has started big textile factories one of which alone employ 8000 workers. While poverty and unemployment has increased by leaps and bounds specially amongst the middle class people in India, there is no unemployment in Soviet Russia and the workers generally get 5 to 12 Roubles a day equal to Rs. 7½ to Rs. 18 a day. Mr. Shipstone, an English observer says: "Before Russia started on her Five Year Plan, she had 1,700,000 unemployed in the principal cities alone. To-day, she has no unemployment. In fact, Russian experts assured me that if a million skilled workmen entered the Union to-morrow, work could be found for them."

With the full support of her people for 12 long years, India produced as per the estimate of the experts, 10 million yards of khadder (as against 2990 million yards produced from Indian mills in 1931-32) and this, we have shewn, could be produced by 9 mills of India which could have been started with a capital of 1 crore or little over—the sums that were raised in India under Tilak. Swaraj

Fund. We have shewn that even in the heyday of khadder movement how the foreign imports have increased and it was through the introduction of more power looms, taking advantage of Cotton Tariff Act, that the foreign import was checked. India just after the war when khadder movement was started had sufficient money to start cotton mills. So it is through the anti-mill propaganda of Congress, that India lost one of her best opportunities to start at least hundred cotton mills not only for her own use but for foreign export which had dwindled from over 11 crores a year to about 5 crores. This is the greatest disservice done by the Congress to the India's economic cause. We have shewn in this book that neither the Congress method has increased the national wealth of India nor can create any funds to spend over the Nation Building departments.

The second movement as initiated by the Government is to bring in an economic regeneration of the country through agricultural up-lift ; and the Land Mortgage Debenture Banks will, it is believed, serve the purpose of financing agriculturists. The present Loan Companies of Bengal which operated like Land Banks advanced loan on the mortgage of landed properties.

Almost all the Loan Companies, the number of which is over 782 with few exceptions, are in the moribund condition due to fall in the prices of agricultural produce. Land Banks will meet the same fate provided any one of the following steps are not taken by the Government :—

- (a) Incorporation of Land Bank Scheme with Insurance Scheme to get a perennial source of liquid cash money to pay interest on Debentures.
- (b) Fixing up of the minimum price level to some staple agricultural produces in order to increase the purchasing power of the agriculturists.
- (c) Industrialisation of the country on a bigger scale to increase the purchasing power of the people to enable them to consume more of the Indian agricultural produce at a higher price.

Secondly:—The Government idea of economic uplift through agriculture will not perhaps be successful unless the above last two methods are adopted. It will not be an economic benefit so long India plays the role of raw material producing country ; without fixing the minimum price of

agricultural produce any increase of agricultural goods (except sugar-cane and date-tree plantation) will mean less price for the same. While the manufactured goods are selling at 4 to 5 times the value of the some of the raw agricultural produces, for example, raw jute, even in this depressed market, Government attempts should be directed towards the industrialisation of the country. Otherwise, we are afraid, like the Congress Scheme of economic development through anti-mill theory, Government Scheme of economic uplift through agricultural uplift will fail.

The only course left open to India is to embark on a *scheme of Industrialisation*. We have shewn in this book how we can convert about 150 crores of the raw produce of India, now exported, to finished goods and we have also seen, how we can start 10 or 12 steel factories in India to supply her with the basic material to manufacture motor cars, to build modern ships, to produce big machineries for the use of railways and factories and to start shipping trade to facilitate the export trade on an extensive scale, in India. The conversion of raw materials to finished goods and the manufacture of steel and other materials will increase the export trade of India to more than

double of what it is in normal years, its import trade will increase accordingly by about two half times. So the custom revenue and the revenue under income-tax and other headings will increase to another 100 crore of Rupees or more—which will give sufficient money to spend over the Nation Building departments, and sufficient revenue to Railways and other bodies so that the interest on their loans will not form charge on the Revenue of Central Government as at present.

If we go through the history of Reforms that have been introduced in India from time to time, we always find that the expenses for administration have increased with the working of fresh Reforms. So unless the national wealth increases—mere change in the Government will not be to the full advantage of India. Hence the first and primary duty of the Congress, as well as of the Government is to embark upon a scheme of Industrialisation of the country.

India is a sub-continent with population of 35 crores nearly one-fifth of the world population. India possesses vast resources which if properly handled, can make India the richest country in the world—a proud position she held

some two centuries back. We have seen in this book that about Rs. 400 crores (as against 10,000 crores spent by Soviet Russia on her Five Year Plan, and huge capital spent by America under National Recovery Plan) will be required to transform India from Agricultural country to Industrial one ; and we have chalked out a Ten Year Plan in which we ask the Government to give minimum guarantee of 4 p.c. to the capital of Rs. 200 crores at the rate of 20 crores a year in the beginning. If the Native States join in the economic regeneration of the country, we may expect another Rs. 100 crores from them in course of Ten years time. We have seen how the unemployment problem, specially of the middle class, can be solved by undertaking the complete Industrialisation of the country. *Industrial India can employ about one crore middle class unemployed ladies and gentlemen* and can furnish more than 100 crores revenue to the Central Government.

We have to recommend a Special Act, namely—Development Trust Act—as the principal machinery of the Ten Year Plan which we believe will not only set at rest the sharp differences between capital and labour in India and all over

the world but will check the further growth of Socialism in the world.

So far we understand, Congress will reject the proposals of the White Paper and will again divert the attention of the Nation towards the Congress campaign. We appeal to our countrymen to minutely examine the achievements of the Congress specially in relation to economic development of the country. At present any movement in India except for the increase of the national wealth and the purchasing power of the people and therewith the increase of the Government revenue, which is only possible with the *co-operation* of the Government, will not be of much use to the country. So we ask our *countrymen* to devote their attention to the economic question only and work out the Reforms good, bad or indifferent ; and in case the Congress does not think, they can join in our programme, it is high time that we should start a separate Organisation for the purpose.

The year 1933 witnessed memorable changes in the economic history of the world. There was World Economic Conference in London in which Silver Agreement and proposal of one standard of Currency for International use were accepted.

Russia's Five Year Plan was completed in 1933 and further Plan for economic development was adopted in the light of the past experience. Soviet Russia will be now one of the strong competitors in the International Markets regarding Agricultural and Industrial products. United States of America has already undertaken a big National Recovery Plan and there is already sunshine in that country after the dark depression for over 3 years. She is trying to introduce Bimetallism in their Currency. America, being now one of the monetary centres of the world, introduction and adoption of silver in the currency will have a tremendous effect on the silver throughout the silver using countries of the world. The present stock of world silver is about 15 times the stock of gold and its present output will be about 12 times that of gold, the yearly world output of gold from mines is 23,000,000 oz. while the yearly world output of silver from mines is 250,000,000 oz. So if silver is re-monetised, it can not only lift the world depression but silver and gold can maintain twice the present world's trade, which means that if the population of the world increases by double they can serve the increasing demands of the world trade. It is also a happy sign of the time that both the Central and Provincial Governments

of India are in dead earnest to launch upon a Recovery plan which will add to the National wealth of India and increase the purchasing power of our people and the discourses in this book may be of some use in that direction.

* * * * *

Lastly this book is not written for *mere* academic discussion on some burning questions of the day, but to start an *Organisation* to give effect to the proposals as contained in this book. So we shall be thankful if we get the co-operation of our readers as well as of the public towards the aforesaid objects.

The author regrets that some grammatical mistakes as well as mistakes in punctuation and in spelling have crept in through oversight.

In conclusion the author acknowledges with thanks the assistance he has got from the Librarian, Commercial Library, Calcutta, for consultation of books and from Mr. M. K. Roy for going through the proof.

1st March, 1934,
5 & 6, Hare Street, }
Calcutta.

J. N. GHOSH

CONTENTS

CHAPTER I.

	Page.
RESOURCES OF INDIA	1— 27
Financial Commitment of India Government ..	2
Plight of advanced Nations	3
Transport and Industrial wealth of India ..	4
Figures of Import, Custom Duties—and Income Tax	7
Mineral wealth of India	7
Outstanding figures of Principal minerals ..	8
Want of adaptability—cause of ruin of Indian industries	9
India's untapped iron ores	10
Criminal neglect of Jute Industries by the Bengalees	11
First English Jute Mill in Bengal ..	12
Tea Industry in Bengal and Assam ..	13
Exportable raw produce—conversion into— finished goods	14
Shipping Transport facilities essential to export trade	15
National Mercantile marine	16
Huge Shipping income on Indian trade ..	17
Ship-building Industry—its possibility ..	18
Agricultural wealth of India	19
Cultivated lands in India and America and the value of agricultural produces—a com- parison	20
Artificial inflation of Tea prices—no solution	20
Greater the agricultural produce less price it will fetch	21
Industrial development connotes larger home consumption	21
Labour wealth of India	23

RESOURCES OF INDIA—(contd.)

Indian middle class youth not inferior to foreigners	23
In a match factory and Tata's Steel factory— an encouraging experience	24
Middle class youth—avenues of employment ..	25

CHAPTER II.

GOLD KING AND SILVER QUEEN .. 28— 50

India drained gold from Europe from Seventh Century B. C.	28
India's gold stock depleted—introduction of silver currency	29
Appreciation of Rupee Exchange helps im- port—but ruins export	31
History of the Rupee Exchange	31
Lord Herschell's Commission	31
Fowler's Commission	32
Chamberlain Commission and Reverse Councils	33
Babington Smith Commission	33
Sale of Reverse Councils	34
Royal Commission on Exchange	35
Rupee linked to sterling	36
The Gold Rush	36
The cause of the world depression	38
How to lift the world depression and with it the depression in India	39
Why Silver Queen should be taken in as partner of the Gold King	40
Gold mania of Bank of England and other allied English Banks	44
Those Busy bodies—"Gold Maniacs"—who have brought about ruin	44

	Page.
GOLD KING AND SILVER QUEEN—(contd.)	
Symmetallism—the only remedy for world depression	47
Result of World Economic Conference	48
Silver Agreement	49
Steadying influence—Sir C. Mehta on Silver Agreement	49

CHAPTER III.

FIVE YEAR PLAN OF SOVIET RUSSIA AND SITUATION IN INDIA ..	51—76
A big Commercial Warfare with 15 crores soldiers and capital of 10 thousand crores of rupees	51
Success of Five Year Plan creates consternation amongst capitalist nations	52
Steel factory at Magnetogorsk with the largest output in the world	54
Success of Five Year Plan depends upon success of steel factories	55
Motor Car Factory under Five Year Plan is the biggest in the world (Ford's contract)	57
Tractor Factory at Stalingard	61
Power Plant at Dnieprostrory the biggest in the world—supplies cheapest power	62
The biggest Oil Reserve of Baku	63
The World's largest Wheat Farm at Gigant	65
Tea Plantation in Chakwa District in Georgia sufficient to meet Russian consumption and surplus to export	66
Asbestos Pit two miles wide will yield twice world's production in 1928	68
Manganese Mine at Chiaturi in Georgia is the World's richest source of high quality Manganese Ore	68

FIVE YEAR PLAN OF SOVIET RUSSIA AND SITUATION IN INDIA—(contd.)

Resources of Russia and India—a comparison	70
Hand-loom industries <i>vs.</i> machine industries	71
Government's protective measures for industries	73
Bengal Coal—inaction of Government and apathy of Bombay millowners ..	73
Government's welcome measures in coastal Shipping Passenger trade	74
Government's benefits under Ten Year Plan	75

CHAPTER IV.

THE TEN YEAR PLAN	77—136
The White Paper and British Merchants ..	77
Present Exchange affords 12½ P. C. bounties to British Import	79
English merchants' help can make India a Greater India	80
Gain of British Merchants—their good qualities	82
British foresight in business—an example to Indians	83
Jute Mill Industry	84
New Jute mills	84
Shipping Industry	87
Ship Building Industry	88
Steel Industry	89
Steel Product Industry	90
Cotton And Cotton Waste	90
Oil Industry	90
Coal	91
Electric Power Plant	92
Motor Car and Tractor Industry	92
Industrial Bank	93

	Page.
THE TEN YEAR PLAN—(contd.)	
Agricultural Bank	94
Insurance	95
Oil Crushing Industry	96
Miscellaneous Industries	97
Sugar Industry	97
Tea and other Agricultural produce	97
Capital for complete industrialisation of India	97
Method of raising capital	99
Government and Ten Year Plan	99
Charge of interest on Revenue	101
Protective Tariff on Sugar	102
Loss of Revenue	102
Balancing of Budget	104
Expenditure of increased Revenue	106
Want of Funds --perpetual complaint	106
Education	107
Sanitation	108
Agriculture	108
Industries	109
Government Loans	110
Revenue from Custom Duties and Income Tax Trade figures per head in U. S. A., England and India	111
Civil Servant and Ten Year Plan	112
Capacity of the Indian Public to subscribe to the requisite capital	114
Total Rupee and Sterling Loans of India Government	114
Net import of gold and precious metal	115
Additional interest of subscribers	116
Congress & Ten Year Plan	118
Origin and growth of Congress	118
Anti-mill propaganda of the Congress	120
Congress adopted Karl Marx	121
Improved machineries are not labour displacing	122
New Theory of Crisis	126

	Page.
THE TEN YEAR PLAN—(contd.)	
Standard of living higher	123
*Socialism cry for improved machinery ..	123
Congress Theory of income and expenses under Swaraj Government	128
Reduction of cost of Civil Administration ..	128
Reduction of Military cost	129
Reduction of cost of interest by repudiation of some Government Debts	130
Other side of the picture	130
What Congress should do to increase pur- chasing power	132
Picketing foreign piece-goods and courting jails is a sickening sight	134
Civil-disobedience Movement	134
Inconsistency of the Congress theory and practice	135

CHAPTER V.

DEVELOPMENT TRUST—AN ANTIDOTE TO SOCIALISM	137—159
Early history of corporate bodies in England	137
Companies formed by Parliament ..	139
Formation of unincorporated companies ..	139
Origin of Companies law in England ..	140
Origin of Socialism in England and in European countries	141
Fantastic Theories	142
Neither Capitalism nor Socialism shall be the future order of Society	142
Corporate Life in India	144
*Number of Companies registered in India and England	146
Number of Joint Stock Companies ..	146
*Origin of Co-operative Societies ..	148

	Page.
DEVELOPMENT TRUST—AN ANTIDOTE TO SOCIALISM—(<i>contd.</i>)	
The main advantages and disadvantages of Corporations formed under Joint-stock Companies Act and Co-operative Societies Act	149
Advantage of Joint stock Companies ..	149
Disadvantages of Joint-stock Companies ..	149
Want of Direct Control ..	150
Total number of Companies in existence with their capital in England and in India	150
Inequities of Joint-stock Corporations ..	151
Inequities of Joint-stock Companies—an example	151
Advantages of Co-operative Society ..	153
Their Disadvantages ..	153
In the evolution of Corporate Organisation ..	154
A new Act <i>viz.</i> Development Trust Act ..	154
Its advantages and utility ..	155
Income of India under Ten Year Plan ..	157
Utility of Development Trust Act ..	159

CHAPTER VI.

ROMANCE OF JUTE	160—221
Sensational development of jute industry ..	160
Early History of Jute Trade	161
Early jute manufacture	161
How Hindu widows earned livelihood ..	162
Early export of gunny	163
First experiment with Jute	164
History of Spinning and Weaving Mills in Bengal	164
Mr. Acland's subsequent experiment ..	165
The Banagore Company and the power loom	168
New mills erected in 1860—70	169
How jute cuttings were utilised	171
New mills and new markets	172

	Page.
ROMANCE OF JUTE—(contd.)	
The Yankee Instinct	174
Prosperity of jute industries and criminal negligence of the Bengalees	177
Jute Manufacture as Career of young Bengal	180
Table of Jute Districts	181
Table of Prices of Jute etc.	183
Technical knowledge of jute mill Manager ..	186
Huge income of Jute Mill in jute centres ..	188
Average income of worker	189
Development of Industrial Colony	189
Jute Mill Industry and its influence on the Indian Public	191
How Jute Industry can help	191
Political feature of success of Jute Industry	192
By way of increased Custom Duties	192
The Income Tax	193
How Jute Manufacture is possible in form of Cottage Industry	193
Location of future Jute Mills	194
How to secure the entire supply of raw jute now exported for the future mills	194
Better condition of the present Jute Mill Industry on starting new mills under Development Trust	197
List of looms and spindles at different periods	198
Capital for the new Jute Mills	199
Government income of the export duties ..	200
20 years figure of Jute Production, Mill consumption and export of raw jute	201
Export Duty on Jute and Jute Manufactures	201
Constitution of Jute Mills under Development Trust Act	202
Mill Manager	204
Training of young men	204
Sanitary condition of new Jute Mills	205
Present Marketing of Jute & Jute Manufactures	206
Future marketing of Jute Manufactures ..	206
Multifarious uses of Jute Manufactures ..	207

	Page.
ROMANCE OF JUTE—(<i>contd.</i>)	
Jute Share Market	208
Security of service for workers in Jute Mills under Development Trust Act ..	210
Provident Fund for Workers	212
Income Tax Charge of Government for Mills started under Development Trust ..	212
Government Guarantee and White Paper Proposals	213
Bengal Youths and the Jute Mills ..	214
The Exports and Indian Consumption of cloth	216
The Exports and Indian Consumption of Gunny Bags	217
The Consumption of Raw Jute as per Annual Reports of the Indian Jute Mill Association ..	218
Value of Jute and Jute Manufactures exported from India	219
Exports of Jute and Manufactures to Foreign countries during 1920—21	220
Exports of Jute to all Foreign Markets ..	221

CHAPTER VII.

SHIPPING INDUSTRY IN INDIA ..	222—266
Fall and decline of the Indian Shipping ..	222
Early history of Indian Shipping and its maritime activity	222
Prehistoric India—a first class power with high civilisation	223
First Iron ship of England	225
Without National Mercantile Marine, Export trade on a bigger scale is impossible in India	225
Fabulous Income of the Shipping Trade ..	226
Coastal Shipping Income	227
Rangoon Passengers	229
The capital outlay on Indian coastal ships ..	231

	Page.
SHIPPING INDUSTRY IN INDIA—(contd.)	
Shipping Capital	233
Sea-going Steel and Iron Steamers and Motor Vessels of 100 gross tons and over, owned by the Principal Maritime Countries ..	234
Capital of the British Shipping	236
Numbers of Ships possessed by the British Companies	236
Profits of one ship company	237
Small capital outlay for Shipping Companies in contrast to big outlay on Railways ..	237
Shipping Income on India's export and import trade (excepting coastal ports) ..	238
Ocean routes are free	238
Immediate return on investment on Shipping Trade	239
As to the Income of import and export of India	239
Calcutta to the United Kingdom, Continent Rate per ton	240
Calculation of freight paid in Export and Import Trade of India	241
Grand total income of shipping trade in India	243
Total income of the Indian Shipping Trade ..	243
Future increased income of Shipping trade in India	243
White Paper and Shipping Trade	244
Commercial Safeguards	244
Rebate system and the shipping Trade ..	245
The cause that led to the formation of Ring and Rebate system	245
Evidence of Sir Thomas Southland before the Royal Commission on Shipping Rings ..	246
How Rebate System ties down the shipper perpetually	247
Chamber of British Shipping is dead against the Rebate System	248

	Page.
SHIPPING INDUSTRY IN INDIA—(contd.)	
The principal Shipping Rings and their Nationality	249
Capital of Shipping Industry	253
How to raise the Capital of Shipping Industry	254
How Ruling Chiefs can help it	254
Profits of the Shipping Trade	258
Expenses for a Round Voyage of 20 days	259
Earnings	260
Shipping as career of young India	261
Shipping career of educated Indians will be a distinct gain for India and will help emigration	262
The Income of the Seamen	263
A monthly wages and victualling Bill for a 7,400 ton D. W. Steamer	263
Number of men that can find employment in shipping trade	264
Constitution under Development Trusts	265
Allocation of profits	266

CHAPTER VIII.

SHIP BUILDING IN INDIA	267—282
India's shipping requirement	267
Raw materials for ship buildings	268
League of Nation's Report	268
Report of other ship building federation	270
Wages of workers in ship-building industry	270
The number of persons employed by different countries in ship building	271
The wages paid by the different countries to the workers in the ship building industry	272
Existing Tonnage of 25 years of age and over 30th June, 1926	273
Oil Tankers gross tonnage of the world	274

	Page.
SHIP BUILDING IN INDIA--(<i>contd.</i>)	
Motor vessel gross tonnage of the world ..	275
Price of the tonnage ..	275
Variation in price of ships ..	275
Value of ships varies with freight trade ..	276
Size, draft, speed and other special specifications are the determining factors of the price of steamers ..	277
How draft affect the price of ship ..	278
How speed affect the price of ship ..	279
Principal sea Tonnage in Midsummer in 1914 ..	280
Location of ship-building yards ..	281
Constitution of ship-building yards ..	281
Workers of ship-building industry ..	282

CHAPTER IX.

STEEL INDUSTRY IN INDIA ..	283—313
Its multifarious use ..	283
Modern age may be called "Steel age" ..	284
India's requirement of steel ..	287
How to produce steel and Iron cheaper in India? ..	287
Huntsman Process ..	289
Bessemer Process ..	289
Siemen's Process ..	290
The electric furnace ..	290
Duplex method ..	290
Steel manufacture of India as compared to the world manufacture of steel ..	291
England's need of Indian Steel ..	293
Indian steel will be required for the Empire ..	294
Japan's need of Indian Steel ..	295
Early History of Iron and Steel Industry in India ..	295

	Page.
STEEL INDUSTRY IN INDIA—(contd.)	
Causes that led to success of Sheffield and America	297
Causes that led to the downfall of Indian Iron and Steel manufacture	298
First Iron and Steel factory in India ..	298
Marshall Heath's first attempt in 1824 ..	298
The second Iron and Steel works at Barakar ..	300
History of Tata's Steel works at Sakchi ..	300
The initial difficulties	300
How a Bengalee geologist spotted out the Tata's present factory site	302
Difficulty to raise Share Capital and subsequent success	305
Tata's service in War	306
Supply of War Materials	306
Contribution of Rs. 6 crores to India Government	307
Location of future Steel Factories in India ..	307
India's need of its own steel	309
How America absorbed more than half of the world gold through steel	310
World steel production figure in 1928 ..	310
Steel produce of America	311
Constitution of future steel factories ..	311
Profits of future steel factories	312
Number of workers that can be employed in Steel Industries	313

CHAPTER X.

MOTOR CAR INDUSTRY IN INDIA ..	314—326
Early History of Motor Car manufacture ..	314
Motor Car manufacture in India—the facilities ..	314
Capital of Motor Car Industry	316
Smallness of Capital of Ford's Factory ..	316

	Page.
MOTOR CAR INDUSTRY IN INDIA—(contd.)	
Why Ford's Factory is Strike proof ..	318
Ford's River Rounge Plant	319
Ford's High Land Park	319
Motor Car Factory in India	321
Location of Motor Car Factory	322
Capital	324
Workers that can be employed in Motor Car and subsidiary industries	325
Constitution of Motor Car Industry ..	325

CHAPTER XI.

BIG MACHINERY INDUSTRIES IN INDIA	327—328
India's requirement of big machinery will increase to about 60 crores a year ..	327

CHAPTER XII.

COTTON MILL INDUSTRY IN INDIA ..	329—350
Cottage Industry vs. Mill Industry ..	329
Cotton Mills in India	330
Hand looms in India	331
Etiology of Khadder Movement ..	332
Congress adopted Karl Marx	332
Second attempt at Khadder Manufacture ..	334
Economics and Ethics of Khadder Movement	335
Khadder movement encouraged foreign import	335
Increase of power looms checked foreign import	337
Success of Anti-mill theory would ruin 70 crores Capital and 4 Lacs workers ..	338
New hundred mills would have been started but for Anti-mill propaganda ..	338
Swadeshi agitation in Bengal chalked the right path	339

	Page.
COTTON MILL INDUSTRY IN INDIA—(contd.)	
Up-to-date machineries	339
New Theory of crisis preached by Congress	340
Now let us see what the facts are ..	340
But the facts are otherwise	340
Unemployment in India is hundred times greater	340
Government of machine using countries ..	340
Education higher	341
Sanitation better	342
Standard of living higher	342
The possibility of running Mill Industry as Cottage Industry	345
India's need of its textile goods	347
Export of Indian Cotton Yarn and manufacture	349
Capital	350
Constitution of Cotton Industries ..	350

CHAPTER XIII.

ROMANCE OF INSURANCE ..	351—423
World when Insurance was not introduced ..	351
Potentialities of Insurance Companies ..	353
Basic principles of Insurance world ..	354
Seeds of mortality of Banks, factory and other businesses	356
Success of Indian Life Insurance Companies ..	360
Indian Insurance men are better than foreign Insurance men	361
Difficulties of Indian Insurance Companies ..	361
Remedies suggested	364
How Life Companies can pay some return to the shareholders	367
Legality of payment of bonus to shareholders ..	370
Guaranteed bonus	371

ROMANCE OF INSURANCE—(contd.)

Starting other classes of Insurance ..	371
Rules under Insurance Act requires amendment to stop high expenditure of Life Company	373
Provident Societies Act must be done away with'	374
Dividing Societies business	375
Another type of Provident Company ..	377
Section 3 of the Provident Act	378
Defects in Provident Societies Act ..	379
India's need of new Industrial Act ..	382
Deposit under Industrial Act	382
Types of Industrial Insurance Companies ..	384
Remedies suggested	389
Social and political service of Insurance Companies	393
Ordinary Life Companies and their duties towards India	395
Scientific culture of Life Insurance Policies through increased purchasing power of the people	395
Assets of Life Companies	396
Scientific culture of Life Policies ..	397
How to increase the purchasing power of people	399
Formation of Federation of Insurance Companies	400
Capital of Federation will earn dividend from the beginning	400
Pooling arrangement	402
How capital for industries will be raised from the public	402
Constitution of Federation	403
Insurance Company that will not join the Federation	404
Place of Federation scheme in Development Trust scheme	405

	Page.
ROMANCE OF INDUSTRY—(contd.)	
Industries that can be successfully run by the Federation of Insurance Companies ..	406
Motor Car manufacturing Company ..	406
Shipping Company ..	408
Ship Building yards and Machine manufacturing Companies ..	408
Jute Mills ..	408
Wider field of Insurance to be tapped ..	409
Crop Insurance ..	411
Crop Insurance is Famine Insurance ..	414
Method of calculating premiums of Crop Insurance ..	416
Circumstances that are to be taken into account in calculating premium ..	417
Rating of premium of Crop Insurance ..	419
Method of collection under Crop Insurance ..	421
Cultivator's attraction for Crop Insurance ..	422
Number of persons that Crop Insurance and Agricultural Bank can employ ..	422
Constitution of Crop Insurance ..	423
Capital of Crop Insurance ..	423

CHAPTER XIV.

BANKING INSTITUTION IN INDIA ..	424—430
Mortgage Debenture Bank ..	325
Difficulties of formation of Land Mortgage Debenture Bank in India ..	426
How Land Banks can prosper in India ..	328
Land Banks are just like Loan Companies in Bengal ..	328
Bengal Government's move ..	430
Agricultural Bank of India ..	430
Industrial Bank of India ..	432
Commercial Bank of India ..	433

TEN YEAR PLAN

AND

Solution of Middle Class Unemployment

CHAPTER I.

RESOURCES OF INDIA.

KEENER and keener the struggle for existence, the higher and more ennobling is Indian manhood in the making ; whereas in the majority of cases the rich and unbounded resources of the Indian provinces and the inherited wealth in Indian homes are synonymous with laziness, luxury, disintegration and what not, a negation of the same often encourages activity, spirit of co-operation and spirit of progressive movement. "The fabulous wealth of Ind."—is fast disappearing. The diadem of the British Empire is lying financially prostrate, its trade paralysed, the war wealth long, long vanished, some of its key industries, such as cotton and coal, jute and tea are in the death grip. Bank facilities have long been withdrawn. Credit, both at home and abroad, is a thing of the past, A

favourable Trade Balance is never to its full advantage such being its queer and out of date Exchange Policy and monetary system which with closing of the mint for silver coinage have resulted in the contraction of currency and dearth of capital everywhere.

The top-heavy administration of the Government with its extraordinarily high military cost even in peace time, absorbing about 45 p.c. of the revenue of the country, and annual commitment of about 44 crores of Rupees as interest on Rupees and sterling loans necessitate imposition of high taxes on the already over-taxed people in utter disproportion to their average income ; the raising of frequent sterling and rupee loans and issuing Postal Cash Certificates and Treasury Bonds at an exorbitant rate of interest vitally affect and stand in the way of the growth of Banking Institutions in India. No Bank can develop in a country where its Government is a strong competitor for investment of the public capital at a rate of interest generally higher than the rate allowed by Banks for fixed deposits, and necessarily trade, commerce and industries of the country languish for want of Banking facilities.

Financial
commitment of
Government.

Added to these there has been a universal depression and stringency of the money market. The background of currency of almost all the Nationals being in gold, and there having been a depletion and shortage of gold amongst the importing countries of Indian goods (excepting United States of America and France) principally through the payment of War Debts to America, and reparations—the purchasing power of the debtor nations such as Germany, England and other countries has been reduced. Again in America from the year 1929 owing to the rabid speculation in shares there have been staggering Bank failures of over two thousand Banks and with them about a million business houses and individuals have been adversely affected. Since 1929 there has been a regular upset in the money market all the world over—which forced a good number of countries to be off gold standard. The cumulative effect of the adverse money market resulted in low demand for Indian goods, and its jute, gunny, tea, rice, cotton, wheat and other exportable goods suffered in prices, and in most of the cases the bare cost of production was not forthcoming, and the above found its reaction and the purchasing power of the people has gone down like any-

Plight of advanced nations.

thing and there is a dearth of capital in almost all the spheres of its activities. The unemployment problem specially of the middle class has become keener in recent years, and the question of better price of some of its exportable commodities and the solution of the middle class unemployment is the absorbing topics of the day.

The resources of India can be divided into five broad categories : (a) Transport wealth ; (b) Industrial wealth ; (c) Agricultural wealth ; (d) Labour wealth ; (e) Mineral wealth.

Transport and Industrial Wealth of India.

Sea-girt India, having 4,000 miles of sea board honeycombed with ports on all sides and 42,700 miles of rail road, affords exceptional facilities for internal and international trade. Nature's abundance has been poured into her with vengeance ; while her sons are being famished, her raw products keep thousands and thousands factories of the world going on, and in exchange she is the dumping ground of their finished products. It is an irony of fate that amongst all the nations of the world India should suffer from a

state of chronic poverty and unemployment. At the present rate of exchange, India's export trade on an average for 5 years ending 1929 amounts to rupees 326 crores a year, and if we can turn her raw materials into finished goods as all the nations of the world do, India can conveniently convert about 150 crores of raw materials exported at present into finished goods ; including the labour and other charges, finished goods can be computed on an average at a price of two and half times of the value of raw materials. So the export trade of India would jump from rupees 326 crores to 551 crores a year. But the complete industrialisation of the country through a Ten Year Plan will necessitate opening of several steel and iron factories, ship-building docks, automobile factories for manufacture of motor cars, lorries, tractors, etc., locomotive and railway rolling stock factories, and factories for production of big machines will enhance the export trade of India roughly about another 100 crores a year. So the export trade of India will on an average be 651 crores of rupees, and taking that the import trade will proportionately increase—the import trade inclusive of import of gold, silver and other precious metals will come to roughly over 600 crores of rupees, i.e., nearly

three times the present import trade which means that the revenue of the Central Government from custom duties and income-tax would be increased by about three times the present income. If the average income of the Government for 5 years from 1925 to 1929 from custom duties be about 50 crores of rupees and from Income Tax be $16\frac{1}{2}$ crores, under the Ten Year Plan with the increased export and import, the income from the custom duties will be 125 crores, a net increase of 75 crores and with increase of Income Tax, Stamp duties and others, further increase of at least 25 crores can be expected. So the total increase of the revenue of the Government will be another 100 crores nearly 80 p.c. increase of the Revenue of the 124.6 crores in the year 1930-31, if not more, and if the average trade balance in favour of India be Rs. 87 crores, it will be nearly 151 crores a year inclusive of import of Gold, Silver and precious metals under the Ten Year Plan, and the quick beating of the pulse of money market, we experienced during war period can be a permanent factor in the Indian economic world. The purchasing power of the people will increase with the increase of average income and the unemployment problem will disappear like mist before sunrise.

Figures for Import and Export, custom duties and income-tax—in Lakhs of Rupees.

Year.	1925	1926	1927	1928	1929
Import ..	221.18	231.22	249.84	253.31	240.80
Export ..	374.84	301.44	319.15	330.13	310.81
	1925-26	1926-27	1927-28	1928-29	1929-30
Custom duties	47.77	47.38	48.21	48.29	51.27
Income-tax	15.25	15.64	15.06	18.70	16.70

Average Import—	239	Crores	of	rupees.
„ Export —	326	„	„	„
„ trade balance—	87	„	„	„
„ Custom duties—	50	„	„	„
„ Income-tax—	16.50	„	„	„

Mineral Wealth of India.

Popularly India is known as “gold producing land.” It does not mean that India is full of gold mines, but the sub-soil of India contains vast fields of diverse minerals, such as iron ores, coal, oil, lead, copper, mica, manganese, silver, gold and other precious metals which can be converted into gold. In most of the provinces, the upper soil is very productive and produces wheat, rye, rice, cotton and jute, which can be converted into gold. The mineral resources of India have not yet been fully tapped. Historians will give credit to the adventurous British merchants for exploring some of the minerals and to late Sir Jamshedji Tata for exploring iron ores. The coal industry in Bengal and Behar began to flourish when big factories were started by the British merchants.

and in a good year the total output of coal brought in a sum of about 25 crores. This was followed by Tata's steel plant in Sakchi. It is the common belief amongst the geologists that only a part of the mineral resources of India has been explored and there still remains to be tapped its vast unexplored field. The total value of minerals produced in India in 1927—£22, 926,882, in 1928—£22,036,722, in 1929—£22,421,228, in 1930—£19,750,233 and in 1931—£17,739,994.

The following are the outstanding figures of the principal minerals produced in India—(in £1000).

	1928	1929	1930	1931
Coal	6,604	6,669	6,861	6,126
Petroleum	4,314	4,880	3,889	4,380
Manganese Ore	2,321	1,542	1,200	727
Lead and Lead Ore	1,642	1,846	1,346	940
Gold	1,588	1,571	1,384	4,541
Building Materials	1,111	1,121	1,096	852
Salt	746	844	944	1,010
Silver	892	803	571	387
Mica	698	784	562	307
Zinc Concentrates	553	409	190	128
Iron Ore	413	484	361	308
Tin Ore	339	448	337	260
Copper Ore and Matte	372	484	521	407
Tungsten	22	113	134	65
Saltpetre	75	72	53	73
Chromite	57	63	64	23
Nickel Speiss .. ..	..	..	54	50
Ilmenite .. ..	..	..	33	42
Jadeite .. ..	..	..	16	26
	<hr/> 21,889	<hr/> 22,329	<hr/> 19,750	<hr/> 17,740

If any other civilized country of the world,—
 Germany, England, Japan or even
 Soviet Russia—were proud possessor
 of the rich resources as India is
 naturally blessed with, they could

Want of
 adaptability—
 cause of ruin of
 Indian Indus-
 tries.

make their country economically the richest country of the world—a proud position which India held some two centuries back—when its ships, loaded with Indian goods and manufactured wares, sailed far and near; when its silk and cotton fabrics, such as *muslin*, were the wonders of the world. But alas! the want of adaptability of the Indian merchants and craftsmen to the modern appliances which followed the invention of the steam power in England sounded a death-knell to the Indian industries. Its sailing vessels of wooden craft were replaced by modern steam-ship of steel—its products of silk and cotton fabrics in looms of woods were replaced by mass production of iron looms driven by power. In the early fifties when cotton trade was almost out of the hands of the Indians and when India was not an exporter but importer of cotton goods, the more adventurous Bombay merchants started cotton mills and introduced the modern appliances driven by steam power. Since then, cotton mill industry is thriving in the country though it

passed through a chequered career in the beginning.

Again though the use of steel and products from iron ores, the rich deposit of India's untapped iron ores, which can be found in several parts of India, were known to the Indians from time immemorial—India till 1911 was importing heavily all the steel and iron products from foreign countries, because the process for manufacturing steel and pig iron from iron ores was a very crude one and could not stand in competition with foreign steel which was manufactured from up to date methods quite unknown to the Indians. Historian of steel industry in India will give all the credit of success in steel industry in India to the illustrious Bombay merchant Late Sir Jamshedji Tata, whose business acumen and genius foresaw a vast possibility of steel industry in India. He made a thorough inquiry of steel industry in England, went over to America and saw that the manufacture of steel from pig iron through *Bessemer* process was the only way of getting the manufactured steel at a very cheap rate and wanted to start a factory in India to produce steel on *Bessemer* process in order to stand foreign competition. Long and arduous

was the search for the real type of iron ores. Though India was abound with rich deposit of iron ores where more than 62 p.c. of iron can be found from ores, it was the selection of site for factory that troubled the prospecting party. It must be contiguous to coal fields where coal, from which coke is produced, can be had at a cheaper rate. At last at a huge prospecting cost of several lakhs of rupees, Sakchi, the present site of the factory, was selected. Now the Tata's iron and steel are flooding the Indian market and its pig iron has got a good demand in Japan and England. Sakchi, which was once a deep forest and full of denizens namely wild animals till 1907, is now supporting over one lac souls in the Tata factory and its subsidiary concerns. India still imports machinery, millwork, metal and ores to the extent of about 40 crores a year. But where is a second Tata to tap its rich deposit of iron and other mineral ores for the above purpose and stop the drain of the huge capital?

Now, look at the other side of the picture—a darker picture, a more abject failure has never been witnessed. Bengal with small part of Assam and, Behar

Criminal neglect
of Jute
industries by
Bengalies.

owns the monopoly of jute trade of the world which yields annually (excepting the figure of last two years) 80 crores to 96 crores of rupees from raw and manufactured products. From a very ancient time Bengal was producing gunny or *chat* by hand loom, which after meeting the demands of the Indian market, exported to foreign countries. From the figures of the year (1850-51) we find the value of export of the gunny from hand looms, was £215,978 when the export of the raw jute of Dandee mills was £197,071. Till 1855 there was no manufacture of gunny by the application of European machinery.

In the year 1855 while the educated community of Bengal was busily engaged in religious renaissance and social progressive movement as started by Maharshi Devendra Nath Tagore and Keshob Chandra Sen, it was to the credit of a Englishman Mr. George Auckland, a coffee planter of Ceylon, that the first jute mill under the name of "Ishra Yarn Mill Company" was started with European machinery at Serampore on the side of the Ganges. Since then one after another jute mill under European management sprang up in and round Calcutta. While in the beginning of this century

First English
Jute mill in
Bengal.

Sir Surendranath and his colleagues were thundering with their oratory for political advance of the country, while the landed aristocracy with a few honourable exception of Bengal, was deeply immersed in luxury and litigation and hoarding the surplus in gilt-edged securities, and while the educated community of Bengal was attracted to law, medicine and service, the European merchants were producing tons of gold in the shape of gunny from the jute mills. A more callous indifference and criminal negligence was never shewn by any intelligent people to the key industry of their own country ; and as such they have left a legacy of poverty and unemployment for the young Bengal.

Tea Industry in Bengal and Assam.

The history of jute mills is not repeated fully in the tea industry of Bengal and Assam, where out of the capital expenditure of about 44 crores of rupees, European capital and European managed gardens form about 90 p.c. of the capital and about the same per cent of acreage under tea in proportion to the Indian capital and gardens. In tea business at least Bengal has realised that there is no dearth of capital in a business if it is conducted on sound lines and a ready response from the public is always available in such business.

Now reverting to the question of converting the exportable raw produce into finished goods, we find the following goods which can be converted into finished articles thereby giving occupation to millions unemployed. We take the figure from the table of export for the year 1925-26. In some years the figure shows a decrease in export, specially in the last two years :—

					Crores of Rupees.
1. Raw jute	..	..	..	..	37
2. Cotton and cotton-waste			..	..	96
3. Hides and skins (raw)	..	..	..	..	7
,, (Tanned)			..	..	7
4. Metal and ores	..	..	..	..	7
5. Oil seed			..	..	18
6. Miscellaneous	..	..	..	..	6
					<hr/> 178

So, roughly speaking, articles worth about Rs. 178 crores and giving margin for bad year, raw and semi-raw produce to the value of Rs. 150 crores can be converted into finished products, and if a Ten Year Plan is chalked out for the conversion of raw produce into finished goods, India can boast of an export trade, at the end of ten years of nearly double the present figure.

But no country can command an export trade on an extensive scale unless it possesses the requisite number of mercantile marine. It is the transport facilities that play one of the most important parts in competing with the foreign manufacturers and without them no nation on the face of the earth can make any headway in its export trade. As an illustration, the case of Soviet Russia can be cited. As the result of the wonderful Five Year Plan, Soviet Russia is importing and exporting big quantities of agricultural produce and manufactured goods ; though it was not possible for her within such a short period to build or purchase requisite number of ships, she has chartered a good number of foreign ships at a rock bottom price to facilitate her trade ; in the meantime they have launched a big ship building industry under the Five Year Plan. Again, what a wonderful part these transport facilities play in export trade is vividly illustrated in the case of Japan. Japan is one of the greatest importers of Indian raw cotton. Now let us take the case of 1924 to 1925. In that year Japan imported about 46 crore rupees worth raw cotton from India. In addition, Japan purchases raw cotton from Canada, Egypt and America ; so also England who has to depend on foreign

Shipping
Transport faci-
lities essential
to export trade.

countries for raw cotton. Under the circumstances it is natural to expect that the piece-goods turned out of Indian mills will compete favourably with the Japanese and English piece-goods in India, China, Africa and other countries in the East. But Indian piece-goods are daily being ousted from those countries by the cheap Japanese and English goods. It is no doubt a wonder how Japan, after paying freight, insurance and duty on the cotton and cotton goods on both ways to and from India, can sell finished piece-goods even in India cheaper than the goods of the Indian cotton mills at a time when the value of the yen was normal in relation to rupee which necessitated the Legislative Assembly to pass the *Cotton-yarn Bill* to safeguard the Indian cotton mills from Japanese competition, and on the fall of the value of yen in relation to rupee, the passing of an Anti-Dumping Bill against Japanese competition was felt a necessity. If we look closely into the matter, we will find that it is the transport facilities enjoyed by the Japanese cotton industry that go a great way to cheapen the cotton goods of the Japanese mills in the Indian market.

The necessity for a national mercantile marine is keenly felt by the Indian exporting houses as will be shewn by the evidence of Lala Harkishan Lal

National mercantile marine—a prime necessity.

before the Indian Fiscal Commission. He stated "that the present foreign steam-ship companies gave preferential treatment to foreign exporting houses as against the Indians engaged in that line, with the result that it was impossible for the Indians to take part in very profitable business." Even in India the success of the British and Japanese cotton goods can primarily be ascribed to the facilities afforded by the shipping companies to the exporting houses of their respective nationals.

It has been estimated that to carry on the present export and import trade (excepting the figures of last two years) India would be requiring about 800 mercantile marine of an average dead weight of 8,000 tons, and with the increased output India would require atleast 2000 ships of 8000 tons.

The present gross earning of the foreign shipping companies by way of freight on Indian export and import trade is about 54 crores of rupees inclusive of coastal trade, and in shape of passenger fare about 3 crores—so the total income of the shipping companies is about 57 crores of rupees in normal years, and the shipping income will be two and half times more at the end of Ten Year Plan—i.e. about 142 crores of Rupees.

So not only for the very existence of export trade on a bigger scale that India requires a mercantile fleet but the shipping industry itself is indeed a very paying industry, where India can employ about one lac and half of its unemployed on a very decent pay, as all the civilized nations of the world are doing.

Along with the advance of shipping business, ship building industry also will grow in India. The principal ingredients in building a ship are steel plate, wood and labour—which India can supply more cheaply than most of the other nations engaged in ship building only. Ship building industry in India will necessitate the opening of big steel factories like Tata's—in and around the area where there is rich deposit of iron ores. So shipping business will be followed by ship building industry, which again will be followed by more steel factories—the three can find employment to more than million young Indians. As a necessary adjunct to the above, subsidiary industries and businesses, such as insurance (marine, fire, accident and life), steel and iron industry of different kinds, will grow, employing a good number of unemployed young men.

Ship building
Industry—its
possibility.

Agricultural Wealth of India.

India is essentially an agricultural country, and development of agricultural produce with good price for the same means an economic uplift directly or indirectly of 87 p.c. of its population. As soon as the price of agricultural produce goes up the purchasing power of the people increases resulting in an increase of import, as the price goes down the purchasing power diminishes and consequently there is less import. Agriculture is the life and soul of at least 30 crores of people. That this important subject is dealt with in a most haphazard way by the Agriculture Department is a well known fact. For example, India from time immemorial was never an importer of agricultural produce. She was all along producing sugar in sufficient quantity to meet her demands and export the excess amount, but now India is importing sugar yearly from Java and even from Russia. In 1925 and 1926 she imported sugar worth 21 crores of rupees from foreign countries. She has got vast field for producing sugar-cane and date-trees for sugar. But there is no organisation to utilise them for producing sugar to satisfy the yearly demand of India and to stop the import of foreign sugar. But after the recent imposition of tariff duty on sugar—some sugar factories have been started—more sugar factories are in contemplation

in India and so that India may be self-contained in sugar, which takes away on average over Rs. 20 crores from India, in course of the next few years.

The agricultural wealth of India stands second to America. The actual area under cultivation in India is over 22 crore acres, whereas in United States of America it is over 52 crore acres.

Cultivated
lands in India—
the value of
agricultural
produce.

India has got a vast area of uncultivated but culturable lands of over 15 crore acres, and besides current fallow lands of over 4 crore acres, it has got lands not available for cultivation of over 15 crore acres. The value of annual agricultural produce in United States of America consisting of 10 crores population is over 6,400 crores of rupees as per census report of 1921, whereas in India consisting of 35 crores population it is less than 1,000 crores, the exact figure of which can nowhere be found. India does not lack in intelligent labour to bring this vast uncultivated but culturable lands under cultivation and can command, like America, an agricultural produce of twice or three times of its present value.

A very pertinent question arises that in some of the years the value of the agricultural produce goes down so abnormally for want of demand from the foreign

Artificial
inflation in the
prices—no
solution.

countries that it scarcely leaves to the agriculturist a margin of profit over the actual cost of production; under the circumstances a further increase of agricultural produces will mean further reduction of prices so much so that even the cost of production will not be available and this will re-act adversely on the agricultural produce. For example, tea is an agricultural produce—the demands from foreign countries have gone down so much so that most of the gardens are not getting even the bare cost of production—a thing which has necessitated a curtailment in production. So a further increase in production will mean a death blow to the tea industry. The question of *supply* being more than the *demand* means fall in prices. This argument holds good for all time to come and we doubt, if any attempt to fix an artificial higher price for goods will be ever successful.

Now so long as there will be no regeneration of Indian industrial activities, the above argument will hold good against any further increase in the agricultural produce of India save and except sugar. But the moment India will embark on an extensive industrial development scheme, India, with 35 crores of population, i.e. about

Industrial
development
connotes larger
home consumption.

one-fifth of the world population, will be requiring more and more of its agricultural produce for local consumption with fair price for the same. In any part of the world, which is both industrial and agricultural country, such as in America, France and other countries the value of its agricultural produce does not suffer in prices as it does in India, which is primarily an agricultural country. Besides the vast population of India will consume more of the Indian agricultural produce with the increase in the purchasing power of the people through industrial development. As an illustration we can cite the case of monthly sale of tea at Jamshedpur, where the Tata Iron Factory and other subsidiary industries are located. The tea sale for that particular area consisting about one lac population is more than the sale of tea in any three districts of Bengal or Behar, consisting of more than 45 lac population and in industrial India, tea will have better price and more consumption than at present. So it can be said of jute and other agricultural produce. Gunny is principally used for agricultural produce. With the growth of agricultural produce and industrial goods, India's present consumption of gunny which is estimated at the yearly figure of 8 crores, will increase proportionately.

The additional cause of increase in the price of agricultural produce lies in the fact that in a country where the earning capacity of a labourer in Industrial concerns is increased, the producer of agricultural products necessarily dictates higher prices for his goods. The price of agricultural produce in America and France which are both industrial and agricultural countries will illustrate the above point.

Labour Wealth of India.

India has got plethora of labour, we mean the educated and half-educated middle class, the brain of India. These sons of India—highly intelligent, sober, dutiful—who can be the pride of any nation of the world, present a picture of poverty and disappointment. After leaving the school or finishing their college career they are roaming about from door to door for employment. The Bar, Medicine and Engineering lines are over-crowded and Government departments can scarcely accommodate such a big army of unemployed. Where intelligence is required and where equal facilities are given, Indian youths are marching side by side with Europeans and in some professions they are excelling them. Indian youths have scarcely got any opportunity in European concerns to show their merit. But

in Tata's steel factory hundreds of young Indians are doing excellently well in the electrical and mechanical engineering lines and they are earning a decent income therefrom. The interested story that the educated community are adverse to manual labour is falsified if the history of workings of Tata's steel factory is read. In tea and coal industry also almost all the managers of Indian tea and coal concerns are Indians and they are doing as best as any European Manager. So also in Indian managed cotton mills and silk factories. In the Indian Banking and Insurance institutions, the chief executive in all the companies except in one are Indian. So it is expected that the Indian youths will acquit themselves honourably if they get an opportunity to show their merit in any business or industrial concern.

The author has the experience of a match
 In a match factory—
 encouraging
 experience. factory, where a few hundred cultured young men of middle class were employed as workers on German match machines, which were most complicated machineries. There were no coolies in the factory. These young men, fresh from their schools or colleges, acquired in an incredibly short time, the knowledge of handling those

complicated machines and ungrudgingly worked day and night for the success of the factory. The manager of the factory who worked with Japanese and German labourers in those two countries had a very high opinion of the capacity of the boys, and often remarked that in his experience those Bengalee young men were more intelligent in grasping the intricacies of the machineries than the Japanese or German machinemen. A counsel of the Calcutta High Court who happened to visit the factory addressed a letter to Lord Reading, the then Viceroy of India, depicting the works of those youngmen in the following lines—"These young men in boy-scout dress and nobody to boss over them did exceedingly well and here lies the chance of a solution of the middle class unemployment."

In India a sum of about 286 crores of rupees is employed by the joint-stock companies mostly in big factories, coal mines and tea gardens ; except some tea gardens, coal mines, cotton mills and Tata's steel factories, the big factories are managed by Europeans. About 15 lac labourers are employed in them. They are recruited from the agriculturists and ordinary labourer classes in India. They are generally known as uneducated class, But uptill

.Middle class
youth—avenues
of employment.

now save and except in Tata's steel factory no attraction has ever been held out for the educated young men of the middle class. No doubt they have got their own susceptibilities. They can be attracted to any kind of manual works provided they have prospects before them. Given equal chance they will prosper as any European in the same field. Previously Tata's steel factory engaged a big number of Europeans and Americans on high salaries ; now, they are being replaced by Indians on a much smaller pay, without any loss of efficiency. So if jute mills be started in jute centres of Bengal—the entire labour can be recruited from the educated middle class, provided they have got future prospects. So in the shipping trade—the whole shipping trade can be manned by sea-men from the educated communities. Likewise in ship building and other trade there will be no dearth of educated men to work in those fields. We have shewn in the subsequent chapters that new jute mills alone can find employment for about 3 lacs educated young men with decent prospects and in other trades in course of few years time, about 10 million educated young men can find employment. The question of unemployment of the middle class young men is a big problem of to-day, and bigger problem of to-morrow. So the

problem should be tackled in a proper way. It is a problem not for this or that political party, not of the Congress alone, but it is the problem which can only be tackled if both the people and Government join hands. If the Government take the matter seriously and in right earnest, and if they give their unstinted support to the Ten Year Plan as a means of solution of not only the unemployment problem, but as a means of increase of its revenues, then and then only there is a chance of the problem being solved. The grim determination of the people coupled with full support from the Government can bring in a period of renaissance of Indian industrial activities and solvency to its Government.

CHAPTER II.

GOLD KING AND SILVER QUEEN.

AFTER the close of the Barter system, Gold King and Silver Queen reigned jointly in the world market and served the purpose of currency and exchange either in internal or in international market. Goods and commodities were exchanged and their values were taken either in gold or in silver, because gold and silver answered the two requisite descriptions of the metal money, first being durable, secondly their output being limited.

From time immemorial India enjoyed trade relations with Europe and her neighbouring countries through land and sea routes. Imperial Gazetter of India says: "About the commencement of seventh century B.C. traffic by sea sprang up between the Persian Gulf and India and even China. It has generally been held that the traffic by sea was much older. An anonymous writer of the first century A.D. has described the trade in some detail and from his work we learn that India exported spices, precious stones, large quantities of muslin and other cotton goods.

India drained
gold from
Europe.

In return India took gold, silver, brass or copper, tin, lead, coral and cloth. The value of this trade must have been considerable for Pliny complains that the annual drain of species from Europe to India was never less than 55,000,000 Sesterces (£458,000)."

How India, sponge-like, drew gold and silver from foreign market is again stated by the Imperial Gazetter in another place : " The steady and long-continued absorption of the precious metals by India has already been referred to. It was indeed the fear of this drain of gold and silver which led the Spanish King, after their acquisition of Portugal, to neglect the Indian trade in favour of that with America. Attacks were frequently made on the English East India Company on the ground that the export of gold and silver was impoverishing the home country."

The continuous absorption and accumulation of gold and silver and other precious metals for several centuries from foreign countries made the position of India as hoarder of precious metals unique and perhaps we may say, without contradiction, second to none. At present America has absorbed more than half of the world-gold. Consider the position

India's gold
stock depleted.

of India in those early days ! In the world market, her wealth was aptly described as “ Fabulous wealth of Ind.” This enviable position India enjoyed down to the period of Moghul Emperor when *Asarfi*, i.e. Badshahi gold coin, was more in use than silver. History records the fact how the gold hoardings of a Moghul Emperor were counted by weighing in maunds for several days together. Then came the East India Company whose servants relieved India of a considerable portion of its gold hoardings. On abolition of the rule and monopoly of trade by East India Company and one assumption of the rule of India by the English Crown, English merchants poured in, took in a very big portion of India's gold through import of British goods or goods of foreign origin, imported by them in India. The centuries old hoardings of the gold stock of India were so much depleted by the action of the servants of East India Company and by the British merchants, that in the early part of the last century gold coin of British India, known as gold *mohar*, of the same weight and fineness of silver *rupee*, ceased to circulate and silver was made the universal money in India and silver was made the Crown Queen of the Currency of India. History records the annexation policy of Lord Dalhousie, but this

annexation of kingdom of gold, perpetuates a currency system for more than a century which is always to the disadvantage of India specially with her import trade with England, and forms the bone of contention in the currency system of India.

Thereafter in the early nineties as well as in the beginning of the present century several futile attempts have been made by Commissions after Commissions to reinstate gold to his old *guddi*, but though the India Government was in favour of it—the Home Government was dead against any such proposal. Lastly we had the Royal Currency Commission—on the strength of whose report the value of Indian rupee was arbitrarily fixed at 1s. 6d., which affords nearly 12½ p.c. concession to the British import in India. To crown all, when England went off gold standard, the rupee was linked to sterling at the above rate.

History of the Rupee Exchange.

“The course of the rupee exchange was formerly determined by the gold price of the silver contents of the rupee: So long the bullion values of silver and gold stood undisturbed, no difficulty was felt in

Lord Herschell's
Commission.

maintaining the rupee exchange steady. But with the demonetisation of silver in Germany and Latin Union coupled with the over-production of silver, the price of silver depreciated much and the rupee exchange underwent a violent fall. A Committee presided over by Lord Herschell sat to investigate upon the monetary situation. Following its recommendations, a notification was issued on June, 26, 1893, by which Government undertook to give rupees in exchange for gold (7.53.344 grains of fine gold per rupee, i.e. at the rate of £1 : Rs. 15). This is the first break of the exchange value of the rupee from the market value of the silver. It was also contemplated to open the mints to the free coinage of gold when suitable opportunity presented itself.

On certain proposals made by the Government of India for the establishment of gold standard in India, another Committee presided over by Sir Henry Fowler was appointed in 1898 to recommend on the Indian financial conditions. The Committee recommended that the Indian mints should continue closed to the unrestricted coinage of silver and should be opened to the unrestricted coinage of gold; the sovereign should be made legal tender and

Fowler's
Commission.

current coin ; the ratio between the sovereign and the rupee should be £1 : Rs. 15, or Re. 1 : 1s 4d ; the profit of the coinage of rupees should be held in gold as a special reserve. The Committee thus contemplated the introduction of the gold standard and gold currency in India but since 1899 the Government of India drifted into a monetary standard which has been called the " Gold-Exchange Standard " owing mainly to the opposition of the British Treasury, and India had to be satisfied with rupee which was nothing more or less than a silver note for 1s. 4d. gold.

A Royal Commission on Indian Currency and Exchange, now known as Chamberlain Commission and Reverse Councils. Chamberlain Commission, was appointed in 1913. The findings of the Committee went to support the measures adopted by the Government for maintaining the exchange value of the rupee. Among the minor alterations proposed were the prompt selling of Reverse Councils and the abolition of the silver branch of the Gold Standard Reserve.

The Great War had a serious repercussion on the price level and the Indian Exchange. In view of shortage of silver an Ordinance was promulgated

Labington-Smith Commission.

on June, 29, 1917, requiring all gold imported into India to be sold to Government at a price based on the sterling exchange value of the Indian rupee. The gold thus acquired was put to the Rupee Currency Reserve as a backing for the issue of additional notes. A branch of the Royal Mint was opened in Bombay in August, 1918; where 21,10,000 gold mohurs and 12,95,000 sovereigns were coined. Another Royal Commission, known as Babington-Smith Commission, was appointed on May 30, 1919. It was decided to link the rupee with the gold sovereign at the rate of Rs. 10 to 1 sovereign, i.e. 1 rupee for 11.30.016 grains of gold. This was brought into effect as from February 2, 1920, and sovereigns were declared legal tender at the rate of Rs. 10 each. Various changes were instituted in the Paper Currency Act and it also laid down the ratio for the issue of currency notes against sovereigns and half-sovereigns at the rate fixed.

This history of the Indian currency subsequent to the adoption of the Babington-Smith Committee Report proved disastrous to India. The post-war boom came suddenly to a close. The exchange could not be maintained at 2s. gold, which at that

Sale of Reverse
Councils.

time meant nearly 3s. sterling. The advantage was taken of the high exchange by the European community to remit to England the great profits which it had made during the War. When the attempt to hold the exchange at 2s. gold failed, efforts were made to hold it at 2s. sterling ; but these also failed. During the whole of this period Reverse Councils to the extent of £55.532 millions were sold. All attempts to hold the exchange at any rate were then abandoned.

A new history opened with the resumption of sterling with gold. This was in June, 1925. A Commission presided over by Rt. Hon. Hilton Young was appointed in August, 1925. The Commission reported in July, 1926, recommending by a majority stabilisation at 1s. 6d. This came to be known as Gold Exchange Standard. The Currency Act of 1927 came into force on April 1, 1927, and was based on the recommendations of the Commission. The Act among others demonetised in India the British sovereign and half-sovereign and provided that such coins should be received at any Government Treasury at the Bullion value of such coins calculated at the rate of 8,47,512 grains of fine gold per rupee.

Events took a new turn with the suspension of the Gold Standard Act of 1925 which required the Bank of England to sell gold at a fixed price. The finance member, acting on his first impulse and in the best interests of India decided by an Ordinance to sever the rupee from the sterling but he was over-ruled. The rupee has now been linked to 1s. 6d. sterling as opposed to gold and the new system is known as Sterling Exchange Standard." Industrial Year Book 1933.

The prosperity of advanced nations is measured by the stock of gold it holds ; because gold is the background of the currency of almost all the nationals. Any depletion in gold stock is synonymous with the decreasing purchasing power of the nation. The war has dethroned many kings, and its aftermath has dethroned gold from the currencies of several countries.

The Gold Rush.

In most of the advanced countries, the silver queen was divorced from gold king who was ruling the currencies of those countries for about 150 years, the silver being relegated to a position of a maid servant in a household solely confined to

internal currency of small value. The silver was thus demonetised. Then began the mad rush for gold. Every advanced country tried to increase its export trade so that it can get more gold from other countries. The stock of gold in the world about 150 years ago was limited. South African gold mine was not explored, nor were South Indian gold mines and gold mines in other parts of the world opened. The gold countries of the world found it very difficult to carry on, except with the help of some sort of inflation, and they introduced paper money, which we in India call G. C. Notes and which are convertible only in silver from the currency. The currency notes of the gold countries are convertible in gold coins. So though currency notes were requisitioned to help the gold king—silver queen was never asked to be his partner. The Bank of England, which was the monetary centre of the world for over 150 years, was a staunch advocate of the yellow metal. But the war supervened. Its stock of gold was considerably depleted. It was found out after the war that though England had won the war it had lost its stock of gold. •United States of America is the real winner in the war in the sense that more than half of the world's stock of gold has fled to America.. The position of France is second and

England is relegated to the third position in respect of stock of gold. Germany replenished the stock of gold exhausted in the war by drawing a big quantity of gold from the world market after war by reducing the value of its *mark* by a questionable method. The huge stock of American gold caused inflation in their money market. As a result there was rabid speculation in shares which caused failures of over 2000 Banks in 'two years' time, and with them million business houses and individuals were adversely affected. The internal position of American financial market is like an ordinary man getting ill after taking too much which he cannot digest. England's export trade suffered after the war, its unemployment increased to such a big proportion that it had got to spend yearly by way of unemployment doles to the extent of over 40 million pounds, *i.e.* a sum nearly equal to 50 p.c. of the revenue of the India Government.

The Cause of the World Depression.

It is the effect of depletion of 'gold stock and its unequal distribution after the war that there is universal depression. England, Germany and other foreign countries (except America and France) which used to purchase Indian goods suffered for want of its former gold stock—hence

their purchasing power diminished ; as a result there is low demand for Indian goods, and the price of the exportable commodities have touched the lowest level, and there is depression and stringency of the money market throughout India.

How to Lift the World Depression and with it the Depression in India.

The depression of the world trade, and along with it the Indian trade can be lifted if silver coin is taken in, as a partner of the gold king and silver is used in international market along with gold. We can clear our position by citing one illustration. Indian *cowri* which was previously used in Indian currency has long been demonitised. Suppose, a man having only Rs. 5 in his pocket wants to purchase goods to the value of Rs. 10. If he has got the credit he can purchase goods worth about Rs. 10 by payment of Rs. 5. If he has got no credit then his purchasing capacity will be limited to Rs. 5 only. Now he has a good stock of *cowri*. He learns that *cowri* has been re-monetised and is now being used in currency. He will then purchase his full needs partly by silver coin of Rs. 5 and partly by *cowri*. The needs of the world can be met as the needs of the above man by re-monetising silver. Silver

along with gold can meet the usual demands of the nations, and their purchasing power would be increased in proportion to the quantities of gold and silver they hold in stock, and world trade will be rejuvenated. President Roosevelt has found out this panacea to lift the depression of the world market, and we find in America, there is sunshine in their financial market after the darkness of depression for the last $2\frac{1}{2}$ years. The factories are again active, reduction of pay is cancelled and there is all round rises in the prices of commodities.

The following are the reasons—**why silver queen should be taken in, as partner of the gold king**, both in internal and international trade.

First.—Since 150 years the yellow metal has been considered as the only metal that will serve the purpose of trade and other needs of the world population which 150 years ago was not more than 50 p.c., of the present world population. With the increase of the population and therewith the increase of the world trade and other needs of the people, one single metal, *i.e.* gold, in spite of its present output from gold mines cannot cater to the needs of the present increased population. It must be backed by another metal, and silver is the only metal which will serve the purpose. Many people

advance the theory that by the increase of the stock of paper money, the present difficulties can be solved. But every Government knows that sooner or later their credit would be shaken by introduction of more paper money. If gold cannot satisfy the demands of the present population of the world, the position would be worse with increase of population in future. If the rate of world population increases yearly on an average by 2 p.c. the population of the world will be increased by about its double in 50 years' time. The world stock of gold along with the yearly output from the present mines, will not be sufficient to meet the demands of over 300 crore souls. The present stock of world silver is about 15 times the stock of gold and its present output will be about 12 times that of gold, the yearly world output of gold from mines is 23,000,000 oz. while the yearly world output of silver from mines is 250,000,000 oz. So if silver is re-monetised, it can meet the increasing demands of the market with the increase of population at least for few centuries to come. The more potential argument for India is that its hoarding of centuries old gold have been greatly depleted but its silver hoardings have not appreciably been reduced. The demonetizing of silver has resulted in fall of the prices of silver—the stock and assets

of the Indian people. Instances are not rare where in the mufasil the agriculturists and labour classes are parting with their silver stock at -/4/- (annas four) a tollah ; Silver, if re-monetised will rise in value. So the monetary condition of India will be easy—the silver stock of its people will get its proper value—which they are denied to-day.

Secondly.—The fear of some of the Banks of the gold countries specially of England and America, is that if silver is monetized it will cause heavy inflation. But what about currency notes and Government promissory notes (Government Loans)? Are they not inflation ? Currency notes are backed by bullion stock of gold in gold countries and by silver in silver countries, like India. But the promissory notes are not backed by any bullion. still they are considered as good assets as per their market value. In India the rupee and sterling loans of the Government are more than 1,212 crores of rupees. The currency notes and the Government promissory notes are much bigger in England and America. If they do not create inflation, silver if monetised, will not create any inflation.

Thirdly.—There are some critics of bimetallism, who believe that if silver is monetised, it will not be of much use in lifting the world

depression. But they have not as yet dived deeper in the question and have not calculated the tremendous influence silver can exert in the world trade. The present world stock of silver will be about 15 times the stock of gold, and the present output of silver from mines of the world is about 12 times the output of gold. So if the value of silver is calculated at $1/15$ of the value of the gold, the present abnormal rise in value of gold or fall in prices of silver should not be taken into account, the present stock of gold will be backed by silver and the combined value will be double the value of the present stock of gold. Hence they can support double the present world trade and if the population of the world increases by double in some future date, gold and silver being combined can cater for the increased population.

Fourthly.—The greatest opposition against bimetallism comes from England. Fortunately or unfortunately England holds larger stock of the share of the gold mines of the world. If silver is monetised, the value of the gold will depreciate. Hence England is against bimetallism. Again the biggest stock of silver can be found in India, China and United States of America. If silver is monetised, the above three countries will reap the

greatest benefit. But the fear of depreciation of gold value will affect America more than any other nation, inasmuch as America holds more than half of the world's gold. Still unlike England, America is for bimetallism as that is the only way to revive the world trade.

The conservatism of the Bank of England and other allied English banks for the Gold mania of Bank of England and other allied English Banks yellow metal has partially led to the world depression. England is facing a big army of unemployed, and its export trade, since the war, has gone down like anything. If England or other gold countries persist in their old views there will be more depression with the result that a time will come when even their much beloved gold will be demonetised and gold will then be used only in ornaments and works of arts as silver is at present.

THOSE BUSY BODIES.

“Gold Maniacs” who have brought about Ruin.

A violent attack on the “gold maniacs” has been made by Sir Henry Deterding, the oil magnate, in his foreword to the book “Facts and Figures about the Crisis” by H. Dunlop.

Sir Henry contends that finance since the war has been in the hands of a few shortsighted

theorists who are ashamed to admit that they have been in the wrong" and says that "their lack of moral courage is the chief cause of the present perplexities in the world. The gold affliction (that poisonous conviction whereby the gold maniacs are ruining trade, particularly international trade) is based on an absence of fairness by maintaining that debts contracted in gold some years ago should be repaid by twice the original quantity of goods. Thus gold protects the creditor but ruins the debtor involving both finally in a common catastrophe."

Sir Henry claims that excessive tariffs in the past few years have been due to the destruction of the value of silver and thus of the purchasing power of some nine hundred million people. He says that he is convinced that "gold monometalism stands condemned by brutal facts" and advocates a universal gold standard. "The gold maniacs admit that there is not enough gold to go round. Yet they refuse to realise that as soon as normal conditions are restored in such large countries as China, Russia and South America, the already existing gold scarcity is bound to become worse. Yet, in order to bolster up the gold mentality they either refuse to discuss silver on its merits

or spread misleading information on production and consumption of the white metal."

He adds that there can be no such thing as over-production while hundreds of millions of people all over the world, especially in Asia, and Russia, are practically destitute and asks ; "Are these people to starve in order to please the vanity of our gold fanatics and economic wiseacres who have nothing to their credit but who are responsible for universal distress amid universal abundance ?"

Again, as to the poor stock of her silver, England need not be much afraid. They are trying by artificial means to put higher value to rupee in connection with English sterling in order to facilitate its export trade with India, where the English manufactures are getting about 12½ p.c. concession over the Indian manufacturers. The raising of more value of silver by monetisations with reference to sterling will be more beneficial to English merchants in their export trade with India.

Further, the present poor stock of silver of England will be replenished in course of time with their trade with India and China. In 1710 the stock of the Bank of England's gold, which was at 10 million pounds was reduced to 1 million

pounds, i.e. a little over one crore of rupees. But consider the stupendous quantity of gold which the Bank of England and other English Banks held up to the period of war. This huge stock of gold England partly amassed through its trade and commerce and partly got in deposit from the foreigners. So if trade and commerce of the world flourish and if the value of silver goes up, it will mean more purchasing power of the Indian people which will mean more consumption of the British goods, as England is enjoying nearly 60 p.c. of the import trade of India, and the poor stock of its silver will be replenished in a very short time.

So far as to our argument for the remarriage of the gold king with his former partner the silver queen, we mean bimetallism.

But bimetallism itself will not be sufficient for future world trade. Because the discovery of any big gold or silver mine in the world will create a disturbance in the world market. So an issue of the combination in certain proportion of gold king and silver queen can rule the world market for centuries to come. Professor Alfred Marshall used to call this issue by the name of *symmetalism* ; recently the World Economic

Symmetalism—
the only remedy
for world
depression.

Conference, which was held in England, proposed to have one standard of currency for international market. Let that standard be composed not of gold alone or of silver alone but by a combination of gold and silver in certain proportions. If the combination is fixed at 15 parts of silver to one part of gold then the present sovereign, instead of being composed and measured by one-fourth of an ounce of gold, will be composed of one-eighth of an ounce of gold and seven-eighth of silver. We have got so many names such as sovereign, dollar, mark, frank, etc., Let us christen the new combination with an international name. We like to call the new combination by the name of *Touchstone*—because it will re-juvenate and electrify all our future trade and commerce, which are dying at present and will act as a real *Touchstone* to the world market for future generations.

Result of World Economic Conference.

That the World Economic Conference, silver agreement would prove to be one of the greatest stimulants to world trade which had yet developed, was the opinion expressed by Senator Pittman to 'Reuter' on the 14th July 1933.

With the half of the world not knowing any other coinage, the rise in the price of silver would

consequently benefit them. The price of silver was exactly half of what it should be. The stabilization of its price would help China to pay off her debt and also assist her in many other ways.

STEADYING INFLUENCE.

Sir C. Mehta on Silver Agreement.

Sir Chunilal Mehta, interviewed by the Associated Press, regarding the Agreement on the Silver question at the World Economic Conference, said that it had a steadying effect on the silver market. The Government of India had secured the privilege of selling 35 million ounces of silver every year. However, those sales by the Government of India as well as Spain would not increase the supply as it used to be in previous years, as it had been agreed that an equal amount of silver would be purchased by the Governments of producing countries viz., the United States of America and Canada. One great advantage is that the world now knows the exact policy of the different Governments as regards silver—(A. P.)

As an explanation of the discourse under this chapter, we are to point out that unless the monetary and currency of a country are put on a sound basis, it is idle to expect a regeneration of the economic condition of its people.

After the Franco Prussian War, the first thing that Germany did was to put her finance and monetary condition on a sound basis, which made it possible for the complete regeneration of the economic condition of its people. For the industrialisation of the country, India would also require that her financial and monetary conditions should be put on a sound basis. The recent discussions on Devaluation of Rupee aim at putting the Indian currency on a more sound footing.

CHAPTER III.

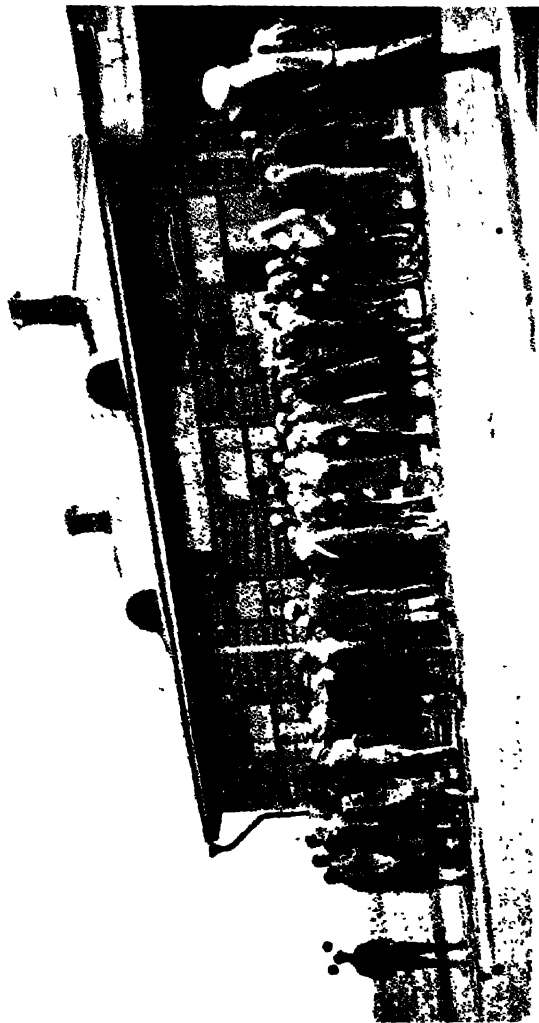
FIVE YEAR PLAN OF SOVIET RUSSIA AND SITUATION IN INDIA.

SINCE 1928 Soviet Russia is at *war* with the Capitalist Nations of the world—not with bullet or machine gun but with a Five Year Plan for complete industrialisation and development of her agriculture through collectivism of farms. The whole department of the Government Planning Commission is already working upon a fifteen year plan to succeed the present Five Year Plan which will be over by October, 1933. The chief aim of the Soviet Government is not merely “overtake” but “outstrip the leading capitalist nations” in a measurable time, say within 7 to 12 years. The officers in the war are 13,00,000 members of the communist party. The soldiers are the entire population consisting of 15 crores people about equal to the combined populations of the three powerful states of Europe, namely England, France and Germany. The chief weapon is 64,000,000,000 roubles of capital investment. The roubles being 2s. 1½d. is equal to Re. 1-8, the whole capital that would be invested

comes to about ten thousand crores of rupees. The Five Year Plan has been launched with specific objectives, namely to increase the production of oil, coal, steel, metal, machine, and to multiply at least by two the total output of all industry and collectivise all farms.

Since the creation of the world, history records big wars, big conquests, big expenditure on armaments, but it is the first time that history records the grim determination of a whole nation consisting of 15 crore souls who stand as one man to solve its economic problem and a stupendous expenditure for complete development of industry and agriculture in Russia and that within a scheduled time—so that its 15 crores population can have better food and clothing and more amusement. The success that the Five Year Plan has already achieved has produced a thrill of consternation amongst the leading capitalist nations. The reasons lie in the fact that not only the export trade of those nations with Russia would suffer but Russia would be a strong competitor in the world's market for disposal of its surplus goods. The additional cause of anxiety lies in the fact that it is possible to compete

Success of five
year plan
create conster-
nation amongst
capitalist
nation



ONE OF THE TEXTILE MILLS OF SOVIET RUSSIA UNDER "FIVE YEAR PLAN"
IN WHICH 8000 WORKERS ARE EMPLOYED

with the individual capitalist firm but not with the powerful capitalist State who can at any time dump its products in the world market even below the cost price. A strong *barrier* in the shape of tariff wall can only protect their industries. But competition in the markets of the nations, not included in Ottawa pact, will be very keen and strong. The success of the Five Year Plan is a bolt from the blue to the leading nations of the world. After their discomfiture in the last Russo-Japanese War as well as in the last European War—backward Russia was placed in the category of third class nations. But out of the ashes of defeat sprang up a nation who is going to challenge the whole world with its industrial products. They are bent on superseding other industrial nations. They are going to utilise their huge untapped fields of iron ores, manganese, asbestos and oil mines as well as their vast productive soil for wheat, rye and tea.

Soviet Russia is always before time. They want to accomplish the big projects of Five Year Plan within 4 years and import all the big machineries from the foreign countries as they are always apprehensive that the capitalist nations will close upon them with choking grip that will

cut off the communist State from the resources of the "Bourgeois" world. It is a fear that approach a phobia. Not that the Soviet Government thinks that within five or four years it can completely industrialize the country, but believes that within that short period it will import sufficient machineries and tools of production to make it possible thereafter to go ahead and build a modern powerful industrial state even if Russia is cut off from the supplies of the outer world.

Now let us see the achievements of the Five Year Plan.—

1. Steel Factory at Magnetogorsk with the Largest Output in the World.

It is vain to spot out Magnetogorsk in ordinary map—as Tatanagore in Bihar was prior to starting Tata's steel plant there. Uptil 1928 there was no human being in Magnetogorsk. It lies on the bare desolate and forlorn Ural—steppe in Asia's border. The mountain is three miles long, two miles broad and 1000 feet high and from top to bottom it is one solid mass of pure magnetic iron. It is estimated that it contains more than 275,000,000 tons of 62 pc. pure magnetic iron ore. It is generally known as Magnet Mountain—

where no watch can accurately run and where compasses are set to twirling.

The Magnetogorsk steel plant is very important

Success of five
year plan
depends upon
success of steel
Factories.

in the sense that on production of iron and steel rests the whole further development of Soviet Russia.

The plant and other steel industry will alone cost about 800,000,000 roubles that is nearly Rs. 1200,000,000 (one hundred twenty crores rupees). If Tatanagore steel factory is considered the biggest factory in Asia, Magnetogorsk steel factory will be biggest in the world. Gary, Ind. steel factory in America uptil now the biggest steel factory in the world manufactures 3400,000 tons of steel annually. But Magnetogorsk plant was scheduled to produce 2,500,000 tons in 2nd year, 3,000,000 tons in the third year and would be capable of expansion to a capacity of 4,000,000 tons a year. Besides the above, there is another steel plant in Russia which produces 1,100,000 tons of steel a year. The greatest importance is attached to the success of its steel plant in Magnetogorsk and the other places. For the success of the Five Year Plan entirely depends upon the success of its steel plant, specially of Magnetogorsk. Five Year Plan is putting biggest factory in the world for

production of motor car, lorry and tractor. Besides steel is urgently required for extension of railway line, construction of rolling stocks and locomotive for the Railways, for construction of heavy machines and tools of production that Soviet Russia is at present importing from foreign countries. Steel is also required for Ship building, which along with cheap Russian wood will be able to push on the Ship building industry at a competitive price. Last not the least the agricultural tools and machineries as well as building materials will be made out of iron and steel produced from its factories. It has created the biggest agriculture firm in the world and has undertaken a big building operation to house its entire population. The pay of the labourers at Magnetogorsk factory is on average five roubles a day, *i.e.* equal to seven and half rupees a day, and in some cases the expert labourers get seven to twelve roubles a day. The labour force at this big plant in the year 1931 was 20,000 which will come to 30,000 in 1933. The Mc Kee Company, an American engineering firm, has been entrusted with the construction of the biggest steel plant in the world in five years time, whereas Gary steel plant took 12 years to complete. "The first completed job set a record for speed. In approximately four months the Ural River

has been spanned with a dam three-quarters of a mile long, containing 40,000 cubic meter of ferro-concrete. Fifteen hundred men, working in 3 shifts of eight hours each, twenty-four hours a day, spurred on by piece work pay (which is condemned by Karl Marx as one of more devilish invention of capitalists), premiums and all sorts of propaganda, have built this dam, according to Jack Clark, the American engineer in charge, as speedily and as best as it could have been built anywhere in the world.

“ Its construction was essential as a first step in order to supply industrial water for the plant. Its completion means that in the spring of 1932 the then rivulet of Ural will be replaced by a Lake eight miles long and a mile and half wide ”—says an American observer, Mr. Knickerbocker.

2. Motor Car Factory Under Five Year Plan is the Biggest in the World.

Having secured the principal raw materials, we mean the steel, for motor car manufacture—Soviet Russia has purchased the patent right of Ford for production of Motor car in Russia at a huge cost. According to the first contract for a sum of £6,000,000. Ford agreed to furnish the

Soviet Automobile Trust with full sets of plans and specifications for his automobiles, to furnish them with 74,000 complete sets of parts for assembly, to furnish engineers to start the plant in operations, and to permit the Soviet the privilege of sending to Dearborn a certain number of engineers to study in his plants.

During the first two years of operation the Nijny Novogorod plant produced no parts at all but assembled cars from parts furnished by Ford. During 1931, 50 p.c. of the parts used for Motor car manufacture was produced in the Soviet plant ; in 1932, 75 p.c. parts were produced by the same plant and in 1933 the plant will produce complete cars from its own manufacture.

This has been called the most intelligent contract yet made by the Soviet for creating a new industry. All the delay and trouble of breaking in the workmen to a totally strange job, so keenly felt in the Stalingrad tractor plant, should be obviated. The Soviets receive from Ford 74,000 cars, pay less for them than the market price, and get all his patents and technical assistance thrown in, with a trained force of workmen.

An American observer says :—" At the time of signing of the Ford contract, the plant's

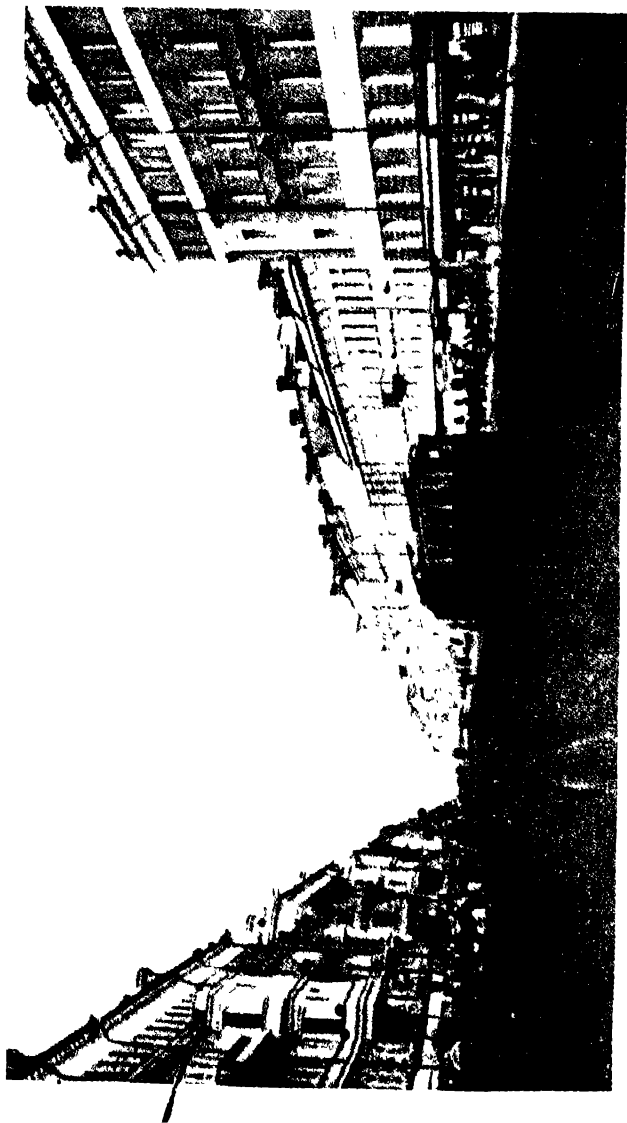
capacity was fixed at 100,000 cars a year. A few months later it jumped to 140,000. At the time of the Ford contract the time required for building the plant was fixed at two years. A few months later when the contract for construction was let to the Austin Company, (an American Engineering firm), the time for building was shortened to fifteen months. This is typical of Five-Year Plan methods. The goal is constantly being pushed forward, always at a little beyond human capacity. The result is a terrific tension in every branch of national activity, and a rate of construction and production that, for Russia, is extremely fast.

“Here, where five months ago there were at most a few families of peasants, are to-day ten thousand men at work, erecting a plant that by the end of 1932 is intended to turn out 140,000 cars a year. They are building the dwellings for a model city of 50,000. One hundred and forty thousand automobiles a year is an insignificant figure for America with its 26,500,000 cars. For Russia, with its 30,000, the Niiny plant is gigantic.”

“Ford has won a very important victory for capitalism in the stronghold of Karl Marx. For

years the Soviet press was full of tales of horror about the 'slaves of the conveyor belt' and Ford was a particular object of unmeasured attack just because his working day and his pay made argument for Socialist superiority so difficult. To-day the capitulation to Ford methods is complete and the ambition of the Soviet Tractor and Automobile Trust is to run its plants as nearly like Ford's are run as possible.

"Their ambition goes much further. 'To overtake and surpass the leading capitalist countries' is the goal of the Plan. The Nijny Plant, with all its delays, should be reaching capacity production in 1932. Together with the other two Soviet automobile factories now in existence—the Amo in Moscow that had a production of 2,585 cars this last year and the Jaroslavl plant that had a production of 711 this year—the total production in 1933 of automobile in the Soviet Union should reach 200,000 according to the Plan. But the Soviet Tractor and Automobile Trust is already talking of the necessity of attaining a production by 1938 of 8,000,000 cars a year. Only thus," says—V. V. Ossinsky, President of the Trust,—can America be overtaken."



A VIEW OF STALINEGRADE

3. Tractor Factory at Stalingrad.

Soviet Russia requires a big number of tractors for cultivation on gigantic scale. The tractor factory at Stalingrad is geared to a capacity production of one tractor every five and fraction minutes, eleven tractors an hour, and 50,000 a year. The aim is to produce 150,000 tractors a year. The International Harvester Plant in Milwaukee has a capacity production of 128 tractors in eight hours, the Stalingrad plant a programme capacity of 88 tractors in eight hours. The tractor here produced is two-ton, 15-30 horse power wheel tractor corresponding to the 15-30 International Harvester machine. From raw metal to finished machine, it is made of all Soviet parts, with the exception of Magneto, Carburettor etc. which will be shortly produced in Soviet Russia. There are about 22,000 workers in the Factory on construction and 7,000 of them on production. A good number of the workers are boys and girls. They get 2 to 5 roubles a day and good mechanics earn about 10 roubles a day. Payment is all on piece work system as almost everywhere throughout the Soviet Union. There are about 380 Americans in the Stalingrad Tractor Factory. American worker here, under a one-year contract, receives from £41 to £64 a month paid into an American

Bank in dollars plus 300 to 400 roubles a month paid in roubles in Stalingrad. The total number of Americans at work in Soviet Russia is about 1,000 and that of British, German and Foreign Engineers about 1,000. The engineers receives £1,000 to £2,000 a year ; most of them not under £2,000. The total American pay roll of the Soviet Union would probably equal £2,000,000 a year. And the Plan calls for doubling or tripling the number of Americans now at work.

4. Power Plant at Dnieprostrory the Biggest in the World.

“ Of all the grandiose individual goals of the five year plan none is more monumental than the project, and during these five years to multiply by five the electric energy production of Soviet Union. In order to supply the big plants with cheap power, (we mean the electricity), Soviet Union is generating an annual 2,500,000,000 kilowatt hours of energy. Here were the stamping grounds of *tarar bul bu* just above the island fortress of Zaparozhian Cossacks. They are famous in Russian romantic literature. To-day the dam, its fabulous horse power, kilowatt hours and cubic metres of concrete are the subject of as many stories in the New Russia as the Cossacks, their lives and love were, in the old”— says an American observer.

Now the question is—what is to be done with the annual production of 2,500,000,000 kilowatt hours. This power is sufficient for Industrial concerns where 8,000,000 people can be employed. As an answer to the question an American observer says: "Of Dneiprostroy's 880,000 horse power, these factories will use 500,000 and the rest will go to the steel plants in Dneipropetrovsk, forty-five miles away, while some lines will run even as far as Don Basin, 180 miles away."

On the production of this huge electric power, the cost to consumers will considerably be reduced. They paid previously at the rate of 7 kopecks that is equal to 1 d. per K. W. H. Now they will be getting power at the rate of 1.2 kopecks that is equal to $\frac{1}{4}$ d. So Soviet Russia will be in a position to manufacture industrial products at a very low cost. In the construction of this power plant more than 50,000 men are employed. The total cost of the construction of factories, equipment and dwelling houses of the new city along the Dneiper Bank will be about £80,000,000. The new city will accommodate a population of 5 lakhs souls.

5. The Biggest Oil Reserve at Baku.

Oil is generally known as a power but Russian oil is more than power in the sense that oil supplies

cash money from foreign countries which she wants so badly for the purchase of Industrial plant and other tools of production from foreign countries under the five year plan. In 1913 Russia had a total production of 62,834,000 barrels.

in 1927	..	79,682,000 barrels.
„ 1928	..	83,992,000 „
„ 1929	..	98,851,000 „
„ 1930	..	119,700,000 „

In 1933 Soviet Russia's oil production will reach to a figure of 280,000,000 barrels that is nearly 341 p.c. of the out-put of the year before starting of the Five Year Plan. Now consider the value of this oil industry for Russia. If the cost of barrel is taken at Rs. 20 the value of the yearly out-put of the Russian oil in the year 1933 will be 560 crores of rupees—i.e. nearly double the value of the export trade of India for the year. The Soviet authorities have estimated their country's natural wealth of oil at 32,000,000,000 barrels with 10,000,000,000 in the territory of Azneft alone. The total United States oil reserve is not more than 5,500,000,000 barrels. An estimate of Venezneta's oil reserves is lacking but they are not considered more than the reserves of United States of America. The pre-

sent output of Venezneta is 137,000,000 barrels and that of United States of America 1,005,603,000 barrels.

Baku though otherwise not beautiful shows the prosperity of Azneft. No city in the Soviet Union has such extensive complexes of modern apartment houses, all for oil workers and employees of Azneft.

6. The World's Largest Wheat Farm at Gigant.

This farm consists of 642,000 acres of land around 1000 square miles. The farm is as large as the State of Rhode Island. It takes six hours to ride across Gigant in Rail road train going 18 miles an hour. It is the largest farm in the world. The permanent labourers numbered about 2,800 on an average monthly wage of 100 roubles. The Government investment in the farm is about 27,000,000 roubles. About 300,000 acres were sown in 1931 and there was 4,000,000 bushels of wheat and rye.

Another successful big farm is at Verblud, which has got total area of 300,000 acres around 470 square miles, of which 55,000 acres were under crops in 1931. In Gigant farm implements and machines, totalled about 8,000 pieces and

Verblud has one man for 45 acres, whereas Gigant has one man for 40 acres for cultivation purpose.

**7. Tea Plantation in Chakwa District in Georgia
Sufficient to Meet Russian Consumption and
Surplus to Export.**

Tea planters in India know it to their loss that the close of the Baltic port for import of Indian tea is one of the principal cause for its low price and demands ; because Russia was the greatest consumer of Indian Tea. To a Russian, tea is of next importance to bread ; on an average every Russian takes six glasses of tea daily, and the trade relation, between England and Russia having stopped, Russia was forced to import Chinese Tea for her consumption. In 1929 came the trouble with China over the Chinese Eastern Railway in Manchuria. Danger was imminent. Though the war was avoided, Soviet Union was equal to the occasion. They tried to produce tea in sufficient quantity for their own consumption. The move has dealt a death blow to the Indian Tea. In 1928-29 Soviet Union imported 29,564 tons of tea mostly from China at a cost of 30,000,000 roubles. Though the figure *per capita* consumption in Russia falls below that of other countries, yet the Russian undoubtedly consumes greater fluid volume of tea than other

countries, for example—in 1925 England had a consumption of 8·82 pounds of tea per person ; Australia 6·1 pound ; Canada 4·4 pounds ; Holland 3·8 pounds ; the United States of America 0·88 pound and pre-war Russia's consumption was 0·72 pound of tea per person.

“ From pig iron or tea, the Soviet Union with its Five year plan proposes to make itself so utterly independent of outside sources for all its necessities that should a united capitalist world in 1933 lay down a universal boycott upon trade with Russia, the Soviet system could not only continue to exist but carry on with its programme of “ industrialisation and socialisation ”—says an American observer. The slogan of Soviet Russia is “ Hurry, hurry, hurry, so we may be through before the blow falls.”

In Russia the pre-war acreage under tea cultivation was 1,825 acres and out-put was 130 tons ; in 1927, it was 246 tons ; in 1929 436 tons ; in 1931 600 tons ; in 1934 it will be 4,800 tons and by 1939—21,000 tons. So Soviet Russia planned to meet the whole of the nation's consumption of tea in 1939. After 1939 Soviet Russia will be in a position to produce a surplus quantity of tea for export to other countries. Thus

Indian tea has not only lost the Russian market but its export to other countries will be greatly affected after 1939 in competition with Russia's tea.

**8. Asbestos Pit Two Miles Wide will Yield Twice
World's Production in 1928.**

The town of Azbest was so obscure that the foreign office in Moscow had never heard of it ; so remote it was about 1,100 miles from Moscow, that never a Russian newspaper man had visited it ; but there is a population to-day of 55,000. The Russians want to put this forest city at the head of the world's asbestos producers. In 1923 Canada produced 273,865 tons valued at £2,312,346 ; South Africa 23,584 tons valued at £404,321 ; Rhodesia 39,000 tons valued at £72,016 ; a world total outside of Russia of 352,449 tons valued at £2,988,278. If the five year plan for " Uralazbest " is realised, it will mean that in 1933 these mines will have production valued at £5,000,000, *i.e.* nearly double that of world's production in 1928.

**9. Manganese Mine at Chiaturi in Georgia is the
World's Richest Source of High Quality
Manganese Ore.**

In 1931 Soviet Russia produced from her manganese mines at Chiaturi 810,000 tons of washed ore and 820,533 tons of unwashed ore.

In 1929 the two mines of Chiaturi and Nilopol mines in the Ukraine produced 1,200,000 tons of unwashed manganese ore with a manganese content of about 50 p.c.

The Georgian Manganese Company has put up ferro manganese plants at Chiaturi at the cost of 13,000,000 roubles and produced 40,000 tons of ferro manganese. The product brings about £20 a ton, instead of the current prices for 48 p.c. manganese ore at £2-18s.-9d. a ton.

So we see how a backward nation like Russia is superseding the leading capitalist nations of the world in course of a few years' time. The unemployed of the large towns alone of Russia was 17 lakhs, but as a result of industrial development through their wonderful Five Year Plan Soviet Russia has not only solved their unemployment problem, but "in fact Russian experts assured me that if a million skilled workmen entered the Union to-morrow, work would be found for them"—says an English observer. This was exactly the position of America till few years ago and people from all parts of the world could not only find employment but could amass decent sum in a short period. The Indians who had been to America a few years ago bear testimony

to the fact. The success of the Five Year Plan is more remarkable when we think that when Soviet Russia started this plan she was virtually bankrupt and that more than 75 p.c. of her population was illiterate.

Now what is possible for Russia—may be possible for India too ; Soviet Russia is a *de facto* socialist state, while India is a capitalist state. She does not want to follow Russia in her socialistic movements, because India is proud of her old civilisation, arts and manufactures. What India wants is production of her arts and manufactures on a modern method. India lags behind the leading capitalist nations not in the natural resources but in not adopting the improved machinery for manufacture. The few industries—such as Tata's steel plant and cotton mills—where improved machineries have been used are successful. If Russia is proud of her oil reserves, asbestos mines, high grade manganese ore, steel plants and motor car and tractor factories, India is blessed with jute and cotton, vast untapped fields of iron ores and other minerals. She has got 4,000 miles of Sea Board and Ports on all sides. She has got railway lines over 42,700 miles, and above

Resources of
Russia and
India—a com-
parison.

all the number of cultured people in India is more than that of Russia. The present gold and silver stock in India is infinitely greater than that of Russia. Now the question of questions is how to mobilise the wealth of India and utilise them for new industries. The present machineries for tapping the wealth of India are defective and out-of-date. Indian Joint-stock Companies Act and Co-operative Societies Act will not be able to cater for the present needs of the people. So we have to suggest a new Act in Chapter V of this book.

Another difficulty is that rightly or wrongly there is a vast number of educated class who still fondle the hope of bringing regeneration in the principal industries of the country through hand-loom and other crude methods. The very idea of modern machineries is nauseating to them. They are still dreaming that millennium will come through the use of old crude methods. Congress is responsible for the idea of preaching anti-mill propaganda. Since 1921, Indian National Congress have borrowed the anti-mill theory of Karl Marx—the chief priest of socialism. It was he who propounded the theory that modern machineries

Handloom
Industries
vs.
machine
Industries.

were the devilish invention of the capitalists, that the improved machineries were labour displacing and that the best proof that Karl Marx found, were the ousting of weaver classes through introduction of power looms. The above theory of Karl Marx is an exploded one and Soviet Russia which is the direct disciple of Karl Marx discarded the theory as childish. They thought that the best way to fight against people with machine gun is machine gun and not with crude and out-of-date machineries. If Soviet Russia wants to "overtake and outstrip the leading capitalist nations" they must adopt the up-to-date machineries for production of their industrial output. So they imported big machineries from America for their steel and other factories and their Five Year Plan is a big success. The unemployment in Russia is thing of the past and they can now find employment for another 10 lacs skilled workmen if they are imported to the Union.

"Before Russia started on her five year plan, she had 1,700,000 unemployed in the principal cities alone. Today, she has no unemployment.' In fact, Russian experts assured me that if a million skilled workmen entered the Union tomorrow, work could be found for them"—says an English observer Mr. W. G. Shipstone.

Another important factor is that it is not by
 Government opposition but by co-operation with
 Protective the Government that the economic
 measures problems of India can be solved.
 for Industries.

Since the termination of war, Government attitude towards the development of Indian industries has underwent a change. In place of pre-war inequitious excise duty on cotton yarn of higher counts, we have got now Cotton-yarn Act and Anti-dumping Act to safeguard Indian cotton goods against Japanese competition. Tata's steel factory is getting all possible help from the Government. In the after-war depression Tata's factory was not only given bounty of 50 lacs a year but Government has imposed tariff duty on imported steel to give enough protection to Tata's steel. But for their timely help, we do not know what would have been the fate of the biggest steel factory in Asia. Again we have got the Tariff Board, who help the struggling Indian industries by imposing protective tariff on the imported goods. Protective duty on sugar is sufficient to develop indigenous sugar mills.

But the Government failed to protect the
 Bengal Coal—Bengal coal. in Bombay market
 Government inaction and against the importation of cheap
 apathy of South African coal by lowering the
 Bombay mill-owners. railway freight. This inaction on

the part of the Government has not only killed one of the key industries of Bengal, but railway has lost a good income out of the freight and Government a good revenue out of the income-tax on the profits of the colliery proprietors. Though coal freight has now been reduced, Bombay mills are using electricity. In the matter of Bengal coal, Bombay mills have not done justice. Though they have grievances against Bengal coal, Bombay mill-owners have conveniently forgotten that Bengal is the best customer of the Bombay mill cloth and it was during the Swadeshi movement in Bengal that Bengal gave preferential treatment to Bombay mill piece-goods which saved the struggling Bombay mills from ruin. So being placed between two fires, one, the apathy from Bombay mill-owners and another, the inaction of the Government, Bengal coal industry—once a prosperous industry of Bengal—is now almost ruined, and there is only chance of its revival if India undertakes a complete industrialisation of the country where coal along with oil and electricity can act as the principal powers.

In shipping trade though Government did not favour Haji's Coastal Bill, reserving the coastal trade to the Indian shipping in preference to B. I. Boats, Government has approved of Government's welcome measure in shipping passenger trade.

a non-official bill regarding the rate cutting system in passenger fares. Rate cutting in both passenger fare and freight on goods as well as Rebate system of the fabulous rich foreign steam-ship companies are the *modus operandi* against the infant Indian coastal shipping trade. Now the Government has stopped the rate cutting method in passenger fare and if similar method is adopted by the Government against Rebate and rate cutting of freights on goods in coastal lines, it will give tremendous impetus to the development of the Indian shipping industry.

Government's
benefits under
Ten Year Plan.

Lastly the financial position of the Central Government, as well as of some of the provincial Governments, is not in an enviable position ; it is a known fact, how difficult it is for the Finance minister to produce a balanced budget. Add to that there is a talk of Federation and federal finance is one of the knotty problems of the day. The Congress could not devise any other scheme of improved finance, save and except suggestions of reducing the expenditure. All they say are, first reduce military expenditure, which is about 54 crores; by Indianisation of the Army, reduce the cost of Civil administration by reducing the high

salaries of the civil servants, reduce the interest amounting to 44 crores by disowning, if possible, some of the Government loans. But as the means devised by the Congress are not within the range of practical politics at present, they do 'not improve the matter. We have tried to show how the present 'revenue of the Central Government will be increased by another 100 crores or so if the Government undertakes ' and works out wholeheartedly the Ten Year Plan. It will solve not only the unemployment problem of India and take the winds out of the sail of the political unrest of the country which is more an economic than a political movement, but it will serve to increase the revenues of the Government to a very large extent.

CHAPTER IV.

THE TEN YEAR PLAN

THE WHITE PAPER AND BRITISH MERCHANTS.

We have seen how inspite of the vast resources of India, the want of adaptibility of its people to modern methods, appliances and up-to-date machineries, India has lost her shipping as well as cotton, silk and jute manufacturing industry and that the attitude of the Government which was once hostile to Indian industry has now changed into active co-operation—in shape of granting tariffs to struggling industries and in some cases substantial bounties to tide over the depression. Add to this, White Paper has recently been issued showing Government proposals for further reforms and along with them the inauguration of the much desired Reserve Bank dealing with the Exchange, Currency and monetary system. The industry, commerce and agriculture will be under the direct charge of ministers. Though discriminative legislation will not be allowed in case of British merchants, it can be hoped that industries in India will get better support with proper exchange and currency system. If the commercial safeguards are used by the Government in such a

way as to afford facilities to the development of the Indian industries, the proposals in the White Paper will then and then only command public confidence, otherwise they will drive them to desperation. If with good bold spirit, these commercial safeguards are exercised, India can chalk out a Ten Year Plan for complete industrialisation of the country. Of course the proposals in the White Paper fall short of the 'expectation of the country, as in the agreement that was signed between Lord Irwin, the then Governor General of India and Mahatma Gandhi, there is a stipulation to the effect that the proposed safeguards should be in the interest of India and not both for the interest of England and India as proposed in the White Paper. There is a vast gulf of difference between the two—because the British merchants in India have amassed huge wealth through trading and through manufacture in India and the infant industries in India if put on a par with them cannot stand in competition and so they would suffer. If any tariff or bounties are proposed for the struggling Indian industries, 'the old established European managed industries will also cry for the same'. If any Indian shipping company wants some bounties from the Government, the fabulously rich British shipping com-

panies will claim the same bounty—if any infant Indian Jute Mill or Oil Company want any help from the Government—the established European managed Jute Mills or Oil Companies with huge reserve at their back will clamour for the same help.

Now look at the Exchange, which in future will be dealt by the proposed Reserve Bank, The arbitrary fixation of the value of Rupee to 1s. 6d. gives nearly $12\frac{1}{2}$ p.c. bounties to the British goods imported in India ; on the other hand, it gives $12\frac{1}{2}$ p.c. more to the capital sent from India to England. English investors have got their capital invested in India, retired English civil servants, who get their pension from India, English officers and merchants who send money from India get $12\frac{1}{2}$ p.c. more when Indian rupees are converted to the English sterling. So by way of annual Home charges and by way of interest and dividend on the British capital invested in India and by way of remittance to Home by the British officer and merchants, if they now remit Rs. 100 crores annually; they are paid in England Rs. 112 $\frac{1}{2}$ crores when converted into sterling. A dividend of Rs. 13-6 p.c. declared

Present Ex-
change affords
 $12\frac{1}{2}$ p.c. bounties
to British
Import.

on any British share capital invested in India will come to one pound i.e. equivalent to previous Rs. 15, when it will be paid in England; now when the Reserve Bank will deal with the Exchange, it is to be seen whether this arbitrary fixation of the value of rupee can be done away with for the interest of Indian industry. We anticipate the British merchants will fight tooth and nail to keep the present Exchange policy of the Government intact. As anticipated the proposals of Reserve Bank as published recently are for continuing the present Exchange Policy intact for some years.

These safeguards and Exchange policy will be great handicaps for development of Indian industries on a big scale. The policy of "Live and let Live" has long long been forgotten by the British merchants. All the so-called proposed democracy in the Government lead but to the autocracy of the European merchants, and from the stand point of economic development of India, the proposed Reforms are not worth the Paper on which it is written, unless it becomes the accepted Policy of the British merchants not to stand in the way of development of the Indian

English merchant's help can make India—a Greater India.

industry. India recognises that the English investors have got huge stake in the country, they admire the business acumen and foresight and honest dealing of the English merchants. Time has come when they should revise their opinion and should not allow India to be future Ireland. We invite their co-operation and their guide to make India a Greater India in Industry and Commerce. India will never be content with all the Reforms so long as the middle class people are allowed to be starved and unless the agriculturists can get higher prices for their produce. Let good sense prevail with them and let them remember the prophetic words of Mr. Baldwin, the great leader of the conservative party in the Commons debate on the White Paper—"If we go forward, we may save India for the Empire, but otherwise we might lose her"—a more true prophecy has never been made by any conservative leader. If on the inauguration of the new Reforms, the English merchants join hands with the Indians to make a greater and contented India, our association with them will be looked with pride and all the discontent in India will disappear; and the English merchant will not be considered, as now, as an exploiter but a friend, philosopher and guide of India.

In helping India to solve the unemployment problem and to raise the prices of its agricultural goods and thereby the purchasing power of the people the English merchants will be helping themselves. India will be in a position to consume more British and the foreign goods than at present ; they will be helping the Federal Government to get more revenue for administration of the country, consisting of 35 crores of souls. Those Indians who have come in business connections with the European merchants have a deep regard for them, for their fair and honest dealings, for their far-sight and for their initiative in business. India recognises their services, specially in connection with coal trade, jute manufacture, oil trade and tea trade. They have done immense services to India by exploring unknown and untapped fields. They have always led the way to business. In the middle of the last century when there was no railway or steamer connections with Assam, the British merchants coming from a distance of thousands of miles entered into the thick forest of Assam, fought with wild animals, cleared the jungles and opened tea gardens. They showed us that tea industry is a paying one and we followed them. Similarly the English merchants

The gain of
British mer-
chants—their
good qualities.

opened coal fields, jute mill industry in Bengal, oil industry in Burmah and Assam and woollen mills in U. P. In criticising the British administration, we forget the noble British character in business. India could have solved many of its knotty problems of to-day, if they would imitate some of the good qualities of the British merchants. With clock-like regularity they attend their business, with assiduity they discharge their tasks, sparing no pains and with honesty they satisfy all those who come in business contact with them; and fortune smiles on those deserving sons of Britains; if the yearly income of some of the firms runs into several crores we should not grudge them. It is not by criticising the British merchants but imitating them that we can raise our economic standard. Late Sir Jamsetji Tata imitated the American Steel Manufacturers, so made his big steel factory success. Bombay merchants have partly imitated the English merchants in cotton mill industry so they are partly successful.

In Tea Business the Bengalees followed the English Tea Planters as regards raising of the crop and marketing them in the Indian market only but not in foreign markets; but they did

British foresight
in business—
an example to
the Indians.

not take lessons from the British Companies in creating reserve out of the profits—so the old established Indian Tea Companies paying more than 50 p.c. dividend to their share holders are now stranded for want of finance to run their concerns. So it can be said in some of the coal industry in Bengal and Behar and cotton mill industry of Bombay under the Indian management. They lack in the farsight and so they did not create any reserve fund as has been made by Jute Mill Industry under European management, for any depression or rainy days.

Now let us see how far it will touch the pocket of the British Merchants in an attempt for complete industrialization of the country and the probable capital will be required for the purpose.

First let us take the Jute Mill Industry

New Jute Mills
require
40 Crores
Capital—
can employ
3 Lacs educated
young men on
decent remun-
eration in
10 years' time
and another
6 Lacs in
2½ years' time.

of Bengal—an industry which along with the sale of raw jute brings in an income of about 100 crores of Rupees in good year. There is an average production of one crore Bales of raw jute—each Bale consisting of 5 maunds—that is 5 crores of maunds of jute are produced in normal year—(the

figures of the last two years being abnormal years are nearly half of the above production). Now there exists over 50 thousand looms which consume on an average 56 Lacs Bales of Jute a year leaving 44 Lacs bales of raw jute either to be exported and partly to be kept in 'stock. These raw jutes are exported to Dundee, Hamburg, Italy, Japan, Jugoslavic countries, America and other foreign ports, and excepting small portion being used in making Galicha, artificial Silk and coarse Woollen goods, the major portion is used in making gunny for bags or for hesian cloth. Bengal with part of Assam and Bihar holds the monopoly of jute trade of the world. If these exported raw jute can be converted into gunny—it would require about 50 thousand looms more and each loom on an average requiring six men, this industry can give employment to 3 Lacs youngmen of Bengal, Behar and Assam in course of 10 years' time and the increase of the looms which stood at about 7000 in 1900 rose to over 49000 in 1925, i.e. the increase is about 7 times in course of 25 years. With the increase of world trade and more demand for the Bengal Jute manufactures—if the world demand increases at least twice in the next 25 years—the looms that would be required to convert them into gunny will be one lac more exclusive

of the present looms of 54,000 and another 50,000 for new mills under Development Trusts Act. So Jute industry can give employment to another 6 lacs youngmen of Bengal in course of the next 25 years and can pay enhanced price to the Jute growers who are at present at the mercy of organised Jute mill owners and shippers.

The invested capital in the jute mill industry at present is about 20 crores. But to start a new jute mill of 50,000 looms, a further capital of 40 crores will be required at the rate of Rs. 8,000 per loom. In acting as shipper of raw jute, the English or Indian merchants either make a profit or suffer a loss as they make the contract. Now if the whole raw jute is consumed into gunny or other articles of value as the foreign importers are doing the pocket of the English or Indian merchants will not be greatly touched. Again the number of shippers will not be more than two dozens, hence gain or loss to them is immaterial to the country when it can give employment and food and clothing to 3 Lacs souls and therewith their dependants on an average of 5 per head, another 15 Lacs souls. Further in exporting raw jute, Government gets a small amount by way of custom duty, But the revenue to the Government

by way of income-tax and custom duty of the manufactured goods will greatly augment on starting these jute mills.

Shipping Industry.—It has been estimated that to carry at least 50 p.c. of the present and future trade India would require at least 2000 ships of 4500 tons to 15,000 tons; and can employ about one lac twentyfive thousand middle class youngmen in the trade on a decent pay and the capital expenditure would be about 90 crores of rupees, i.e. at the rate of 9 crores each year for ten years. We anticipate a great opposition from the present shipping companies. But they should remember that because they enjoyed monopoly of the Indian trade in the past they would be allowed to continue the same for all time to come. Their deferred Rebate System should be stopped. The Safeguards in the White Paper do not go to the extent of perpetuation of the unfair competition with the Indian National Mercantile Marine. The implication of Safeguards is that the British Shipping Companies should be placed on equal footing with the Indian Shipping Companies. Either the Indian Shipping Companies should be taken in their Ring or the Deferred Rebate System should be done away with. More-

over the Chamber of Shipping of the United Kingdom has condemned the Rebate System as adopted by the British and other Ring liners in their following report as made in 1932.

“Free access to an open freight market that is freedom to traders to use the most effective and efficient carrying power that is available is essential to the prosperity of international commerce.

The British Shipping industry, in the interest of this country, and of the Empire, should adhere to the policy of freedom of seas, on a footing of equality to all ships, under all flags, in all coasts, in all international and inter-Empire trades and in so doing it will not only serve the interest of British trade but of the trades and shipping of the world.”

Ship Building Industry.—The materials for building big liners in India can be had cheaper. The steel plate, the wood work and the labour cost in constructing ship in India will be cheaper than in most of the ship manufacturing companies of the world. If ship building is undertaken in India, it will require opening up new steel and iron factories to meet its demand. India can not only supply its own requirement in ships but can also sell to the outside world. The capital that will

be required to carry on ship manufacture industry will be about Rs. 40 crores. But as Ship Building Industry would be financed by shipping trade so a sum of about 20 crores would be sufficient for that purpose. This Industry can find employment to about 2 to 3 lacs middle class young men on a decent pay.

Steel Industry In India.—Steel and iron are considered as a basic materials for Ship-Building, Motor Car, Tractor, Locomotive and Jute Mill and Cotton Mill machineries and other big machinery industry. The development of the above industries in India would only be possible on the development of her Steel Industries. India will not be able to compete with other nations if the imported steel is used in their productions. Soviet Russia has invested a sum over 120 crores of rupees towards the development of her steel industry and one plant at Magnitogorsk has the capacity to produce 40 lacs tons a year besides other factories producing another 11 lacs tons a year. In 1913 alone the British Shipping yards consumed besides other iron parts 14 lacs tons of steel made from steel ingot of 18 lacs tons, i.e. equal to $3\frac{1}{2}$ years output of Tata's Factory in 1925. To cope with the industrial development in India

at least 50 to 60 lacs of tons a year of steel and iron will be required. So about 10 fresh steel factories each with an average capacity to produce 6 lacs tons a year will be the India's requirement in course of 10 years' time. It is estimated that a capital expenditure of 100 crores of rupees, i.e. 10 crores a year will be required for the purpose and this industry can find employment for 4 to 5 lacs middle class youngmen.

Steel Products.—India imports Locomotive, rolling stock, Railway materials, other machineries and mill work parts to an average value of about Rs. 17 crores a year. To produce the same stock in India starting of several factories will be necessary for which a capital of about Rs. 20 crores will be required.

Cotton and Cotton Waste.—Raw cotton and cotton waste form either the principal export or the export next to Jute manufacture and raw jute, which brings to India a sum of Rs. 96 crores and to consume this 'huge quantities of cotton and waste, India will require a capital of at least Rs. 40 crores.

Oil Industry.—This industry is in developed state in Burmah and there are three big

companies which were extracting oil from Burma and Assam. A new oil plant has been put in Attock in the Punjab. The oil products of India is very poor in comparison with the world output* of oil as regards quantity. India produces only 0.63 p.c. of the world output. But oil is a power and in development of Indian industries fresh oil fields will be required to be opened. Though the experts in the line were not very sanguine as to further traces of oil fields in India—yet the discovery of Attock oil fields in the Punjab and recent discovery of oil fields in Bombay should be eye-opener to all. There are traces of oil fields in Assam. But as the prospecting cost a good amount of money specially in speculative nature many people are deterred from such prospecting campaign. We think a capital outlay of 5 crores will be required for the development of fresh oil fields.

Coal. Coal is the chief power in almost all the industrial concerns. Though coal trade at present is not in flourishing state, opening of fresh industries such as steel factories, Jute mills, Cotton mills, Shipping etc., will require opening up of fresh coal fields for the purpose. We think a capital outlay of Rs. 5 crores will be required at the rate of 50 Lacs a year for the purpose.

Electric Power Plant.—India cannot develop its industries unless it can secure the cheap power for the purpose. Sukkur Burage Scheme has been started to supply cheap power to Bombay mills. Two big power stations have been opened in the Punjab & in Mysore. Similar big power stations will be necessary in and around industrial centres to supply cheap power—the cost of erecting these power houses will not be less than Rs. 12 crores. The whole output of oil in India, is less than one p.c. of the world oil output. So more power plants in India will not only be useful to industrial concerns but to people at large who depend on kerosine oil for light. The Dnicprostroy power plant under Soviet Russia is supplying current to the consumer at 1·2 kopecks i.e. $\frac{1}{4}$ d. i.e. 1 pice per K.W.H. whereas Calcutta Electric Supply Corporation is charging nine pices $2\frac{1}{4}$ d per unit exclusive of Rebate. In some mufasil towns the Electric Supply Company charges 7 annas i.e. 7d. per unit, so big power plants supplying electricity at a low cost will be boon to mufasil consumer.

Motor Car and Tractor Industry.—At present India depends solely on foreign supply regarding its motor car and tractor,—the steel being cheap in India—this Industry can be developed

in India much cheaper than foreign products. The question of loss of 30 p.c. import duties of the India Government can be met from the income-tax of the Industry. This Industry will require a capital of about Rs. 5 crores at present and it may be possible for India to export its car and tractor to foreign countries as other nations are doing specially in Africa and countries in Asia. Command of the richest deposit of iron ores consisting 60 to 62 p.c. of iron gives India the facilities of production of motor car at a cheaper cost than any countries of Asia or Europe. Further development of the motor car Industry will require further capital as the circumstances demand. Ford's motor factory was started in 1903 on a paid-up capital of less than one Lac of Rupees.

Industrial Bank. An Industrial Bank will be an essential counterpart for development of industries ; without Bank of this type, industrial progress in India will be an impossibility. Let us explain our position—if in any part of the year the foreign quotation of industrial produce is weak—the Industrial Bank can finance the output till better tone of the market. For example—a 100 yards hessian which is usually sold at Rs. 11/4/-

if the foreign quotation is Rs. 9 the jute mills can wait for better days and this is only possible when there is arrangement for finance. Otherwise just like the present day Indian agricultural produce, there will be less profit on the product or the product will be sold at a loss. The Bank finance gives the staying power which in business world is one of the greatest factor for success of the concerns. A capital of 10 crores will be sufficient for the purpose for the Industrial Bank can count upon a good deposit from the Industrial concerns under the Development Trusts and as such its position will not be inferior to the position of Reserve Bank or Imperial Bank of India.

Agricultural Bank. India being essentially an agricultural country, there is no agricultural Bank to finance the agricultural produce. Agricultural Bank is the greatest desideratum of the country. It is often found that during the season of any crop such as rice, wheat, jute, cotton, the prices go down as the people whose chief profession is agriculture require the funds urgently to pay rent, taxes, loans and other necessities of life. If there is any agricultural Bank which can advance them against their crop—they can dispose of their products—when there is a good price for

the same. It means that the agriculturists may get 10 to 20 p.c., higher price for their products if they can have a staying power through the advance of Agricultural Bank. Along with the Agricultural Bank, *Crop Insurance* can develop each financing other. The agriculturists can borrow premium and other expenses for raising crop from the agricultural Bank and the Crop Insurance company can keep deposit the premium and other income with the Agricultural Bank ; and in case of failure of crop the Crop Insurance Company can pay the Agricultural Bank the indebtedness of the agriculturist and if there remain any balance the agriculturist can get the same. Again when the crop is raised—the agriculturist can get an advance against the hypothication of crop to meet his urgent demands and wait for better times for the sale of his products. A capital outlay of 15 crores in course of 10 years will be required for an Agricultural Bank. The capital of the Crop Insurance as well as its premium income will be deposited in Agricultural Bank.

Insurance.—India is still an infant in the domain of its Insurance business. It has got several Life Companies and the yearly business inspite of the depression of the market is steadily

progressing. It requires the development of some composite companies dealing in Life, Fire, Marine and Accident business. With the development of shipping business India will require several big Marine Insurance Companies to cover risk of shipping companies as well as the goods in transit. Through accident insurance excepting income out of Fire, the yearly premium income of the British companies amount to over Rs. 50 crores and if income of the fire department is added to it—the total yearly income will be about Rs. 100 crores of Accident Insurance Companies.

India present a favourable field for development of *Crop Insurance*, i.e. insurance to cover the risk of failure of crops through rain, draught, insects and other causes. No country in the world is subject to such whims and caprices of Nature as to the raising of crops which are the occupation directly or indirectly of majority of its population. A capital of about Rs. 15 crores will be required to develop its Insurance business in all its department.

Oil Crushing Plant.—India exports raw linseed, sesamum and other oil seeds to the value of Rs. 18 crores a year—it will require a good number of crushing plant—the capital expenditure of Rs. 1 crores will be necessary.

Miscellaneous industries—such as paper, glass, electric goods, hides and skin, etc.—a capital outlay of Rupees 15 crores will serve the purpose.

Sugar Industry.—It is not merely the setting up of sugar mills that can stop the import of foreign sugar and make India self contained regarding sugar but cultivation of sugar cane and date trees on extensive scale to supply raw materials to the mills that will be a great desiderandum. Of course the present raw materials can support only a few sugar mills and that for a few months in a year. A sum of at least Rs. 2 crores will be required to cultivate sugar cane and date trees as well as to start the requisite number of sugar mills, to stop a drain of about Rs. 21 crores in the shape of yearly import of foreign sugar.

Tea and other agricultural produce.—Unless the purchasing power of the people develop through the industrialisation of the country and unless the world trade revive any further development of Tea Industry and other agricultural produce will not be judicious as that will affect adversely the prices of the commodity.

So in all, India will be requiring a capital of Rs. 400 crores more or less for complete industrialisation of the country. If investment of this capital

Capital for
complete
Industrialisation
of India

can be made, the position of India as a raw producing country will be changed into an Industrial country. Its export trade will jump from yearly average of Rs. 326 crores to over Rs. 651 crores with an import of like amount inclusive of gold and other metals. The development of the main industries will naturally lead to the development of industries like soap, ink, glass, paper, matches, broad casting, cinema and other hundred and one smaller industries. The main business of Bombay is cotton manufacture and all the other industries in Bombay owe its origin directly or indirectly to cotton trade. But situated as India is specially with regard to its economic condition raising of such huge amount of capital within a course of 10 years' time is outside the pale of practical politics. Besides there will be a strong competition with the foreign companies in or outside India who have already amassed fabulous wealth in the Industries stated above. A further difficulty arises in the fact that the Indian youths lack in the technical knowledge of the industries. Though in the beginning India will be requiring the best expert knowledge of the foreigners to manage the show—yet the technical knowledge of the workers can make a concern success under the guidance of the expert managers. The best

course lie not in the headlong plunging in the thing but to go on with caution and moderation. So we think a capital expenditure of Rs. 200 crores in the above industries in a course of 10 years' time will give sufficient data for future plan of capital expenditure of another Rs. 200 crores or more in course of another 10 years' time for further industrialisation of the country.

Method of raising Rs. 200 crores capital on an average Rs. 20 crores a year for the first Ten-Year Plan. At the outset we must confess that it is impossible to raise yearly such a huge amount of capital of Rs. 20 crores without any minimum guarantee of interest as well as safety of the capital by the Government. We think a minimum guarantee of 4 p.c. interest with a provision to allow participation in the profits of the industry as and when they will be earned upto another $3\frac{1}{2}$ p.c. the capital being repayable within 15 to 20 years' time will facilitate the raising of the required capital from India and abroad. The Government has already given guarantee of such minimum dividend to the Railway Companies.

Government and Ten-Year Plan.—In asking the Government to give guarantee of the minimum interest to the capital for development

of India's industry, we want the Government to commit to an yearly expenditure beginning with Rs. 80 lacs in the very first year gradually rising upto Rs. 8 crores a year in the tenth year on capital of Rs. 200 crores. The first question is,—will it be justified on the part of the Government to make such a big commitment of yearly expenditure? The Government which is responsible yearly about Rs. 44 crores towards the interest of the both rupee and sterling loan on the already existing loan of over Rs. 1212 crores (upto the period of March of 1933) can not on the face of it make any further commitment unless there be strong reasons for that. The question of industrialisation of the country and solution of unemployment may appeal to the Indian public but not to the Government with such legacy of debts and poor income. These arguments will appeal to any civilized country where unemployment insurance or doles are paid out of the revenue of the country. England spends annually out of revenue unemployment doles over Rs. 60 crores. But at present we will not indulge in those topics as it will serve no useful purpose. Suffice it to say that it is for the very administration of the country namely to meet its military and civil cost and to pay the interest of the capital already borrowed and to spend more on the Nation building.

departments and to produce better budget that we ask the Government to give the above guarantee to the capital. The yearly revenue of the Central Government is about Rs. 124 crores out of which interest on the capital already borrowed is about Rs. 44 crores and military expenditure is about Rs. 54 crores, total cost on interest and military expenditure comes to about Rs. 98 crores.

But the charge on Central Revenue for interest is reduced if the concerns on which the interest bearing loans have been invested can fulfil their financial obligation. In Railways alone the Government guarantees interest for capital investment of Rs. 751 crores ; and it is a known fact that during the last four years of depression, the Railways have to draw money from the depreciation funds to extent of 32 crores to meet their financial obligation regarding the interest on the capital invested in them, and the money drawn from depreciation funds tantamount to drawing from capital. If this state of affairs continue for some time, which in all probability will remain, the huge interest on the Railway loans of Rs. 751 crores will be charge on the Central Government Revenue. So it can be said of other interest yielding loans

Charge of interest on Revenue will increase with increase of depression.

which amount to Rs. 217 crores. If Rs. 10 crores and 79 lacs be estimated as the actual charge on the Revenue for the year 1933-34 there is every possibility of the charge being increased if this depression continues for some time more.

Besides the above, the recent protective tariff imposed by the Government on the import of sugar and cotton piece goods is another important items for consideration. In the post-war period about two third of the Revenue of the Central Government came from custom duties—principally from duties on import. Now import duties on sugar contributed 10 crores and 68 Lacs in 1930-31. On the imposition of protective Tariff duty on sugar import—the Revenue to the Government on import duty will fall to 5 crores in 1933-34 and by 1935 there will be no income from sugar import duty—as it is estimated that by 1935 India will be self-sufficient regarding her requirement for sugar. So fresh source of taxation should be resorted to, to make up the loss of over 10 crores Revenue a year for sugar import duty.

The loss of import duties on cotton piece goods is more staggering. In 1930 the Indian cotton mill production was 1893 million yards whereas

Protective Tariff
on Sugar means
loss of 10 crores
revenue.

Loss of revenue
under Cotton
Tariff Act.

foreign import was 1937 million yards but in 1932 taking advantage of the protective duties on cotton piece goods, under *Cotton Tariff Act* the production of Indian cotton mills stood at 2990 million yards whereas that of foreign import at 776 million yards, i.e., about 25 p.c. of the import figure of 1930— which means that the Government Revenue on the import of foreign piece goods suffered accordingly.

Any further increase in import duties or income-tax is impossible. The fall of import from 234 crores in the year 1929-30 to 129 crores in 1932-33 corresponds to the fall of export from 310 crores to 155 crores in the corresponding years. But the Government has to increase the custom duties, so much so, that 41 crores were levied as import duties on 234 crores of Rupees import but 40 crores were levied on 129 crores of Rupees import in 1932-33. Can the foreign import stand any more duties ; Equally the Income-tax which has been raised on an average by 80 p.c. since 1929-30. Under the circumstances it must be the first concern of the India Government to help India for increased export. And as the export of raw produce may suffer in prices as in the past two years and as there will be a less chance of India's purchasing power increased so long she will remain

as a producer of raw material to the world—it will be the primary duty of the Government to help India to convert her raw produce into finished goods so that her export trade can increase and therewith her import trade which means an increase of the Government revenue through custom duties.

So it is an increasing difficult task for Finance Minister to balance the budget.

To balance the Budget is almost a hopeless task unless Ten Year Plan is undertaken.

Besides the above hopeless condition there are some terminable loans which are to be paid off from time to time. This often proves to be the last straw to break the camel's back. You can criticise the Finance Minister for his income-tax policy or for this tax or that tax but the question is—he is to meet the legacy of debts left by his predecessors as well as the high military cost. Over and above this financial commitments the estimated revenue on account of custom duties as well as on Income-tax which are the main sources of Central Government revenue falls short either through boycott movement or through fall-off in the purchasing power of the people. When the Finance Minister falls in a predicament like this he has to resort to temporary borrowing either through postal cash certificate, treasury bills or a

temporary accommodation from Imperial Bank in expectation of revenue collection. So long this is the financial position of the Central Government any Finance Minister whether he be Indian or European, will have a extreme difficult task to balance the budget. And the question is—you cannot reduce the expenditure on interest account unless you can repudiate some of the loans—a most unlikely event ; neither you can reduce the military expenditure unless you can Indianise the army which is impossible without India attaining full fledged Dominion Status—a similar argument holds good in case of the high cost of civil administration. So there is no way left for any big reduction of the existing expenditure of the Central Government ;—in view of the aforesaid commitments, whether it would be justified for the Central Government to make any further commitment by way of giving guarantee for minimum interest on any capital expenditure under Ten-Year Plan, specially the industries that have been chalked out under Ten-Year Plan is passing through crisis ; and if this crisis continue there is every likelihood of meeting losses in working expenses than making profits. The answer to the first part we can get if you can imagine a case of any individual man, say, a son getting a legacy of debts and

financial commitment from his father along with his Estates ; and what he should do under the circumstances. If he be prudent enough, the first thing he will do is to make an attempt to increase his revenue. In doing so, if he has to undertake some risk by way of small speculation he should do that. The answer to the latter part is, that in between this time and the actual workings of the scheme there is every possibility of the world money market going up and then the plan can be put in actual operation ;—and secondly such industry can be taken in hand now where there is a chance of making some profit. Hedged in meshes of difficulties the best thing for Central Government is to undertake certain small risk for increase of its revenue.

Expenditure of Increased Revenue.

The Montford Reforms placed the Nation Building Departments such as education, sanitation, industries and agriculture under the direct charge of the Indian Ministers. But paucity of funds proved the greatest stumbling block for the Indian Ministers to make any head way in that direction. On the inauguration of the financial autonomy in the provinces—the matter will not be

Want of funds
perpetual
Complaint of
Nation Building
Departments.

improved in any appreciable way. The mere financial Autonomy in the provinces cannot create any funds. If half of the income arising out of the jute export duties are conceded to Bengal as per strong fight of Sir N. Sircar with the help of Bengal Government—Bengal will simply be in a position to meet her present yearly expenditure and in good years will have some excess. But this small increase however welcome cannot meet the increasing demands of the province in her Nation Building departments. The position of provinces other than Bengal will remain the same as under Montford Scheme. The only salvation lies in the increased revenue of the Central Government—through complete industrialisation of the country. We have seen that changing the position of India from raw producer to a producer of finished goods will bring in an additional income to the Central Government, of the sum of Rupees 100 crores or there about. Now let us see how we can improve the position of the country with that increased income :—

1. Education. That only 7 p. c. of the people is literate and 93 p. c. is illiterate is a permanent slur on the British administration of the country for about 2 centuries. The com-

pulsory free primary education both amongst male and female cannot be undertaken for want of funds. If out of Rs. 100 crores increased revenue Rs. 20 crores are spent over free compulsory primary education amongst both male and female and if the remuneration of the teacher is fixed at Rs. 20 to Rs. 30 a month, India can provide about 7 Lacs teachers both male and female in the education department.

2. Sanitation. Like education, sanitation can employ about 5 Lacs people if 10 crores are spent over it.

3. Agriculture. India being now more an agricultural country than Industrial one and as more than 70 p.c. of her people is directly or indirectly dependant on the income of the Agricultural produce—and as the principal source of the Government revenue in the shape of custom duties depend upon the high price of the agricultural produce which connotes the increasing purchasing power of her people and thereby the increased import—it should be the first concern of the Government to see that the value of the agricultural produces does not go down. In Japan and in America the price of the staple crop such as rice in Japan and wheat and cotton in America cannot be allowed

to go down beyond certain level. In order to keep the price up to standard level Government of their respective countries purchase the excess stock—so as to dispose of either in the favourable markets or in some cases to destroy the excess amount. The new shipment of the Japanese rice in the Indian market is the stock held by the Japanese Government. In America, besides other economic causes, such purchases of the staple crop prevents the influx of the agriculturist in the towns to swell the rank of unemployed. Now if Government of India adopt the principles followed by the Japanese and American Governments the value of the Agricultural produce of India will not be in that case, at the mercy of, either the organised attempt of the mills and shippers or the low demands from the foreign markets. Now out of the anticipated increased revenue of the Indian Government, they can earmark a sum of about 25 crores for the purpose. It is not that in every year they have got to spend the money, but it is only in the year of depression as it exists to-day that they have to spend part or whole of the sum so earmarked otherwise it will form a reserve fund for any future contingency.

4. Industries. The above principles can be applicable in the case of industries—specially

those industries which will be developed out of the capital guaranteed by the Government. A sum of 20 crores or thereabout out of the increased revenue can be earmarked for the purpose. If the sum is not required to finance the Industries, this will form a reserve fund for future contingency.

5. Government Loans. We have seen that the average sterling and rupee loans that the Government require to raise is 29 crores of rupees a year from 1914 to 1928. So the Government would not require to borrow any further loan from the public—as the Government can meet its requirements from the increased revenue or in case if loan is not required it will be kept in the reserve.

A comparative survey of the revenue and expenditure of other countries will illustrate our point.

Revenue from Custom Duties and Income Tax.

	Population. (In crores)	Custom. (In crores of Rupees.)	Income-tax. (In crores of Rupees.)	Total Revenue.	Revenue per head
England ..	4·80	199·8	483	1240	Rs. 250/-
America ..	11·60	98	317	1250	„ 100/-
India ..	35	50	16·50	124	„ 3/-

So it is found that though India is possessed with population of 35 crores, nearly one-fifth of the world's population, its income under the

heading of custom duties and income-tax the principal source of income of the Central Government is too small. The first thing for any Government is to see how the revenue under the above two heads can be increased and so long India is an out and out agricultural country as supplier of raw produce to the world the purchasing power of the people will never increase. Moreover the export of raw produce brings to India a sum of an average of Rs. 326 crores, so its import must fall to the level of export trade. Industrialisation on an extensive scale is the only panacea to raise both of its export and import trade. Let us take a survey of export and import of some civilized countries :—

	Export	Import	Trade figure per head.
America ..	1410	1200	Rs. 337
England ..	975	1560	„ 500
India .. (average)	326	239	„ 16

So the very first thing for the administration of the country should be to increase the export by converting the raw materials and we have seen in the previous chapter that at least Rs. 150 crores of raw materials now exported can be conveniently converted into finished goods and computing the average price of the finished goods at two and half

times of the value of the raw produce (inclusive of labour cost) the present export trade of Rs. 326 crores will come to about Rs. 551 crores ; add to that there will be additional export of another Rs. 100 crores through industrialisation and a proportionate rise in import inclusive of bullion and metal by way of import will give sufficient revenue to the Central Government by way of custom duties and income-tax, and the revenue of the Government which stands now at Rs. 124 crores will be increased by at least Rs. 100 crores. The present custom duties comes to about Rs. 50 crores and present income-tax $16\frac{1}{2}$ crores. On the rise of the export trade by more than double and import trade by $2\frac{1}{2}$ times the revenue under the heading of custom duties and income-tax will be increased by more than Rs. 100 crores. So the military cost will come down from 45 p.c. to 25 p.c. on the revenue. Likewise the cost of civil administration will go down.

Civil Servant and Ten-Year Plan.

As to the high cost of civil administration of the country—when we consider the meagre revenue of the country and the poor conditions of its people, the cost of civil administration is no doubt a highly disproportionate figure. There is

an outcry against the high salary of the civil servants—but when we consider the income of an average Bura Shahib of an European firm with the income of a civil servant of 20 years' service, we shall see that the senior civilian in spite of all his education and troubles does not get even one-tenth of the average income of a Bura Shahib and on retirement, the average Bura Shahib commands an income more than the income of 2 or 3 dozens retired civilians. The monthly income of late Lord Inchcape was more than the income of several hundred retired civilians. While we protest against the high salary of Civil Service, we allow ourselves to be drained by the European merchants and make no attempt to capture the industries of those merchants.

If India grudgingly spends, say, about 50 lacs of rupees a month on an average pay of Rs. 2500 for 200 Civil Servants, India ungrudgingly allows herself to be drained of at least a monthly sum of Rs. 5 crores by the 200 European merchants and man to man the Civilian is more qualified than the average English merchant.

As we have seen that with the actual working of Ten Year Plan resulting in the increase of the revenue, the present military cost may come down

from 45 p.c. to 25 p.c., so the high cost of civil administration will come down with the increase of revenue of the Government.

Capacity of the Indian Public to subscribe to the requisite capital.—Now if the Government consents to give guarantee of the minimum interest, the question is whether it would be feasible to raise the required capital for Ten Year Plan from India at the rate of Rs. 20 crores a year. Demand for investment on the Indian capital is made by the Government of India, sometimes by provincial Governments and sometimes by the public bodies such as Municipality, Port-Commissioners, Improvement Trust; and we give here the amount of drawings by the India Government for 14 years beginning from 1914 to 1928.

Total Rupee and Sterling Loans of India Government.

	<i>(in crores of rupees.)</i>		
31st March in 1914	510.19
1918	693.91
1922	832.48
1923	881.74
1924	919.00
1925	970.02
1926	996.36
1927	1006.19
1928	1026.37
1929	1074.46
1930	1138.23
1933	1212

The Rupees debt rose from 179 crores in 1914 to 650 crores in 1930—yearly average for years at 29 crores from all sources from the Indian and English money markets.

Besides the above, the newly started limited companies of India, drew about 100 crores of rupees from 1919 to 1928. Let us look to the import in the shape of gold and precious metals during 1914 to 1928.

Net imports of gold and precious metal, in India (in crores of rupees.)		Balance of exports over imports. (in crores of rupees.)
1914-15	16.51	37.24
1915-16	3.72	61.31
1916-17	32.08	87.12
1917-18	44.22	80.54
1918-19	62.35	66.35
1919-20	64.35	114.32
1920-21	8.59	79.80
1921-22	12.23	33.91
1922-23	59.54	69.88
1923-24	47.88	126.19
1924-25	94.00	146.87
1925-26	51.97	150.81
1926-27	39.26	70.13
1927-28	28.32	59.70
	<hr/> 565.17	<hr/> 957.11

So we see that a total sum of Rs. 565 crores of gold and precious metals have been imported

in India during the 14 years under review at an average rate of about 40 crores a year. India has exported gold from the time England went off gold standard to middle of April, 1933 to the value of 144 crores of rupees and she has got in exchange increased value of the Gold so exported. Besides the success of 4 p.c. and $3\frac{1}{2}$ p.c. conversion loans in the beginning of the year is an interesting development from the financial point of view. From the above it is clear that should Government guarantee the minimum interest and if the subscriber gets an additional amount out of the profit of the business, the required capital for Ten Year Plan can be raised from India.

There will be an additional interest for sub-
 scribing to the capital when people
 will find that the Government is
 pledged to development of the
 industries of the country in which there is a
 prospect of solution of unemployment of the
 country as well as chance of paying higher prices
 to some of the agricultural produce—the philan-
 thropic sentiment will be raised, and the proverbial
 hoarding spirit of the people will give in, and the
 whole amount of the required capital would be
 subscribed. Tilak Swaraj Fund raised an amount

Additional
 interest of
 Indian
 subscriber.

of one crore of rupees mostly from the subscription of annas 4 per head, and if one rupee per head is subscribed, India can raise 35 crores a year when the money is not spent in charity but in development of the industry of the country in which the financial well-being of the people is bound up and in which investment people will get more interest than Postal Savings Bank deposit.

The capital will be contributed not only by the rich and upper middle class but by the poor classes also.

Actuated by nobler feeling for service of India and coupled with the safeguards as to the minimum return on the investment, the wealth of India can be mobilised and the capital required for ten years can be raised from India alone. In order to make the Loan popular—it can be raised through post office and poorer class will be attracted by the Loan Bond of lower denomination. Sometimes the demand for loans is made on the Indian public by the Central Government as well as the Public Bodies. Under the circumstances, the loans under the Ten Year Plan can only be raised at a time when the market will be favourable for raising such loans.

Congress and the Ten Year Plan.

The original idea of starting Congress in India was to focus the public opinion in criticising the administration of the country as well as to secure such democratic Government where the people may have the controlling voice. In the later stage it took the form of Dominion Status and with some extreme section an independent country without the British connection. In the year 1905 Swadeshi movement was started in Bengal, and Boycott of the British goods was resorted to as a weapon to induce the Government to cancel Bengal partition. As result of this movement, Bengal started Cotton Mills, Life Insurance Companies and some Banks and the educated communities were more attracted to business. In 1911 the partition was annulled by His Majesty the King Emperor. This ushered in a period of peace and contentment in the country till the Great European War broke out in 1914. India helped the British Government with men and money. The British Government by its Declaration in 1917 roused an expectation in the Indian minds that self government in real shape will be granted to India. The Mont-Ford Scheme in the

Origin and
growth of
Congress.

Government was introduced, but it could not satisfy the Congress—which started Non-co-operation movement in the year 1921 under the guidance of the Hero of the South African campaign whose selfless devotion to the cause of the country coupled with the past experience in the line made him at once the uncrowned Leader of the country. While Bengal started the Swadeshi agitation and wanted to stop the import of English piece-goods through starting of the mills with modern machineries, the Non-co-operation movement started with Khadder and anti-mill propaganda. The entire educated community, the males and females were stirred up with the idea of making India self-sufficient regarding the supply of piece-goods through Charka and Khadder movement, and thereby making additional income during leisure hours and they took to it; subsequently this Charka was followed by more handy Tackli movement, and we could find people going in a tram or sitting at home spinning thread through Tackli—the successor of Charka and at present out of the 1000 men engaged in Charka-Tackli activity 999 at least have given it up. The reason lies in the fact that the economic side does not appeal to them though some of them are still using Khadder. There can be no gainsaying

the fact that as India produces more Khadder there will be less imports of the foreign goods and had it been possible to stop the entire or substantial portion of foreign piece-goods through Khadder movement—it would have been a proud day for India. Let us see the effect of the Khadder movement on the import of the foreign goods :—

				In crores of rupees.
1919	..	..	..	59.08
1920	..	..	..	102.12
1921	..	..	..	56.94
1922	..	..	..	70.13
1923	..	..	..	67.48
1924	..	..	..	82.33
1925	..	..	..	65.67
1926	..	..	..	65.05
1927	..	..	..	65.16
1928	..	..	..	63.24
1929	..	..	..	59.49
1930-31	..	..	..	25.25
1931-32	..	..	..	19.15

So it is found that Khadder movement has not as yet been able to make any appreciable reduction of foreign import ; on the other hand foreign import increased during the heyday of Khadder movement, and heavy reduction of foreign import in last two years is due to increase of looms and spindles.

As to the Anti-mill propaganda of Congress.—Another movement with Charka was an Anti-mill and machinery propaganda undertaken by the Congress in the early part of

Non-co-operation movement. In these days of machinery this movement appeared to be a very interesting one. It owed its origin to the orthodox doctrines of socialism which characterise machinery as the devilish invention of capitalist concerns. But this is never followed by any one in the world and lies more in the doctrine than in actual practice. Let us quote James E. Le Possignol on his "What Is Socialism :"

"The introduction of labour-saving machinery and improved methods of production creates a vast reserve army of the unemployed, and impoverishes the whole working-class, while the capitalists accumulate a mass of commodities which they can neither use nor sell. The result is chronic over-production and under-consumption, with periodical crises, which threaten the very existence of the capitalistic system. This is the theory of crises taught by Robertus, Marx, and most orthodox socialists." With regard to the introduction of power loom, Karl Marx says, "History discloses no tragedy more horrible than the gradual extinction of hand loom weavers."

The anti-mill and machinery propaganda of the Congress owes its origin to the obsolete and exploded socialist creed which has got no adherents in any

Congress adopted Karl Marx's
Anti Mill Theory.

civilised part of the world except its new converts the Congress of India. Even in the country of Tolostoy—the Guru of Mahatma Gandhi—we find in Soviet Russia's Five-Year Plan huge up-to-date machinery and plant have been started to produce manufactured articles at a competitive price.

The theory of improved machinery displacing labour is not borne out by actual facts. Improved machineries are not labour displacing but employ more labour. Labour saving machinery, is not labour displacing but employs more labour. The chief reason lies in the fact, that when mass production is made through improved machinery, the price of the manufactured goods falls, so that they can be disposed of in the international markets at a competitive price, so there will be good demands for the goods both at home as well as in the international markets necessitating employment of more machinery and there—with more labourers. Thus in the year 1820 there were about 111000 operatives employed in the cotton spinning mills of England and in the year 1880 when improved machinery were used there were 240000 men employed and at much higher wages. Similar instances can be found in the United States where 3,800,000 were engaged in manufacturing and mechanical pursuits and with introduction of more

improved machinery in 1910 there were 10,800,000 men, i.e. more than 400 p.c. were employed in those industries. In 1880 there were 72,700 printers, lithographers and pressmen in the United States, and after the introduction of Linotype and other labour saving machines there were over 206,000 men in those industries.

Higher wages and shorter time—that the men employed in improved machinery get high wages and are employed shorter time is even admitted by Karl Marx who calls them nominal wages but not real wages—but the fact is that the purchasing power of wages has arisen in England, Germany, the United States and in all machine using countries while poverty and stagnation characterises the countries such as China, India and other backward countries of Asia who are using more hand looms and are dependent on the foreign imports of the countries using labour saving machinery.

This is so well understood in England and the other countries that the socialist writers like Sydney and Beatrice Webb say in their "Industrial Democracy,—“ It is not the individual capitalists,

Standard of
living higher in
machine using
countries.

Socialism cry
for improved
machinery.

but the Trade Union which most strenuously insists on having the very latest improvements in machinery."

These are the stern facts of history and you cannot meet them by mere camouflage.

An article has been issued in paper regarding the recent experience of Sir Hari Singh Gour, Leader of a party of the Legislative Assembly of his China visit. There was a war between China and Japan. Japan used to sell a very considerable amount of its piece goods to China. Now China wants to boycott Japanese goods and use Indian made piece goods. Would you now export Khadder to China or send piece goods manufactured from your machinery?

Secondly.—The present unfortunate position of India regarding its shipping, gunny, cotton, silk and other industries is due to the want of adaptibility of the people to the modern appliance which came into existence on the introduction of steam power in England. The civilized world utilised the invention to their advantage while India did not. So India lost her shipping trade; its hand made gunny, cotton and silk were replaced by mass production through modern machinery driven by steam power. The mistake that India

committed about one hundred years ago is going to be repeated with the sanction of the Congress.

Thirdly.—It is contradictory to preach anti-mill and machinery doctrine but to use machine made goods. Even Swadeshi mill piece-goods were tabooed but not the foreign motor cars produced from the foreign factories. If luxury flies by the backdoor in the use of Khadder as Sir P. C. Roy says but luxury enters through the front door when motor car is used. How ridiculous it looks when Khadder clad congress leaders riding in motor cars of foreign make, using petrol and motor parts owned by the foreigners preach the gospel of Khadder and anti-mill socialism.

Fourthly.—If with starting of Non-co-operation movement cloth mills were started as were done in Bengal during the Swadeshi movement—India could have been blessed with more than hundred mills in provinces like Bengal, Behar, Orissa, Assam, U. P., Madras, Punjab, which depend for their piece goods either on the foreign imports or on the Bombay mills. Cloth mills were then making profits and their shares were in demand and India had at that time, just after the war, sufficient money to subscribe to the capital of piece-goods mills. So it lost one of the best

opportunity to start a good number of cotton mills in India to make India almost self-sufficient regarding its requirement of piece-goods.

Fifthly.—Khadder propaganda are made by middle class educated ladies and youngmen but Congress holds no immediate prospect of employment for those cultured and self-sacrificing men and women.

India is now keenly feeling a want of organisation that can tackle successfully the question of development of industries and thereby the solution of unemployment problem. India feels that the question of its economic development should not be left in the hands of a political organisation like Congress, but should be dealt by an entirely separate body just as Congress wants a separation of judiciary from the executive to get undiluted justice.

Sixthly.—In any scheme of economic development of India, Congress should join as this will mean more money to India and more peace and contentment in the country.

The new "Theory of Crisis" as preached by the Congress leaders in imitation of Karl Marx "theory of crisis".—As a natural outcome of adopting the Anti-mill theory of Karl Marx the congress leaders preach that the people of the

machine-using countries have got unemployment and the condition of those people is not good—and that if India uses up-to-date machineries—unemployment will increase in India.

We have discussed elsewhere in a separate Chapter—that the facts are otherwise, for example—if the figure of unemployment in machine-using country is 1 lac or 2 lacs, in India it is 1 crore or 2 crores i.e. at least hundred times more. That in all advanced countries there is unemployment dole or relief—England spends annually about 60 crores—the India Government with its poor income can scarcely make any payment towards unemployment. That the standard of living in machine-using countries is much higher than in India, China and in other countries not using machines. That the education and literacy of the machine-using countries is much greater than in India—who has got 7 p. c. literate only.

That the sanitation of machine-using countries is better than that of India.

The fact is—the machine-using countries have got sufficient revenue to spend over Nation-building Departments where-as Government of India with its poor income cannot do so.

Congress theory of income and expenses under Swaraj Government.—Now let us see how Congress wants to manage the administration of the country under Swaraj Government. In the most fundamental point we do not get much light from the Congress. Let us assume that full Swaraj is granted to India, and as no light has been thrown by the Congress as to the increase of the income we take the figure of the present income of India i.e. Rs. 124 crores a year for the Purna (full) Swaraj Government. But the Congress recommends the following reductions in expenditure in order to enable India to make a decent savings in the expenditure to spend in the Nation building department.

(a) Reduction of cost of Civil Administration.—The Congress has rightly pointed out that in comparison with the poor income of the people and of the Government, the expenses under the heading 'Civil Administration' is disproportionately high. So they recommended the reduction of the present cost of Civil Administration. But if we are to judge the cost of administration of the Calcutta Municipality which is run by the Congress group, we will be sadly disappointed. The sample of reduction of management cost of

Calcutta Corporation under Congress leaders shows what the Swaraj Government will do when the administration of India will be handed over to them. Instead of reduction or any relief, the tax payer of Calcutta has to pay higher taxes under the present Corporation. So the statement of Congress as to reduction of the cost of Civil Administration should be taken at a discount, and though small reduction is possible it will be of little help to the country.

(b) Reduction of Military cost.—Congress recommends Indianisation of the army and reduction of the high military cost. Indianisation of the army may reduce the present military cost. But the defence of the frontier provinces and campaign against the frontier tribes absorb the major portion of the military cost and the frontier tribes will not be docile because India gets Swaraj but will be more turbulent and troublesome. Again if it is possible to reduce the military cost by half through Indianisation of the army—India will have to shoulder huge cost of a well-equipped Navy for her very defence. The capital investment on Navy will have to be made through borrowings—the interest on the same would be a permanent charge on the Revenue of the country—besides

the huge cost of maintaining a well-equipped Navy. So any reduction of the present military cost will be counter balanced by cost of keeping Navy for defending 4000 miles of sea board of India.

(c) Reduction of cost of interest by Repudiation of some Government Debts.—

Out of the total debts of the Government amounting to Rs. 1212 crores interest yielding assets amount to Rs. 968 (Railway 751 crores) and total realisable assets to Rs. 1006 crores—so that the uncovered margin is Rs. 206 crores of rupees. If Repudiation of debt is at all possible, it will be a sum out of Rs. 206 crores. Out of this debt—if we take the figures of debt owned by the Indians which no sane persons will try to disown,—we will find that reduction of cost of interest by repudiation of some money borrowed in England is a very small sum. So we do not get much light from the Congress ways of thinking.

(d) Now look to the other side of the question.—If India is granted full Svaraj—the first thing that India will demand is a protective tariff to safe-guard the National Industries—just as other countries have developed their industries in the beginning. Protective tariff will mean less

import—just as we have got on sugar. The result has been that India Government has lost custom revenue of 50 p. c., i.e. about 5 crores in the year 1933-34 over sugar import and they expect to lose another Rs. 5 crores in the year 1934-35 during which year India will be self contained regarding her sugar production. The protection under the Cotton Yarn Act has served to reduce the foreign import of piece goods thereby the custom duties in India. Sir George Schuster, the Finance member says “India is one of those countries, for her main source of revenue, in fact about two third of her tax revenue, in the post-war period, come from custom duties.” Now the more protective tariff in other Indian Industries under Swaraj Government would mean less import (so long the economic condition of people will remain as it is) and less custom duties—as custom duties on import form the major portion of revenue from custom. If the import stands at 239 crores (the average figure of the five normal years) the same will fall almost half of it under the protective tariff of the Swaraj Government. So the income will fall proportionately. Neither the Congress gives any light as to the increase of revenue under Income tax—because Congress preaches cottage industries—so any increase of revenue under income tax is

impossible and rather there is a possibility of its decrease.

So we find that any decent reduction of expenses as adumbrated by the Congress is 'not possible and that the present primary sources of Central Government revenue under the headings 'custom duties and income tax' rather would suffer under Swaraj Government.

What Congress should do.—We have seen that under the full Swaraj Government Congress ways of thinking will not be of much practical help. The first and foremost consideration either of the Congress or of the Government should be how to increase the purchasing power of the people. With the increase of the purchasing power, there will be increase of the import and therewith the custom duty and increase of revenue under Income Tax—the two principal sources of revenue of India Government. The purchasing power of the people will never increase unless India embarks upon a big scheme of Industrialisation of the country through up-to-date machineries. Some still holds the view that India being essentially an agricultural country—the agricultural uplift will raise the economic standard of its people. But the fact is otherwise. The more agricultural produce, the less price for

the same. But the manufactured goods are sold at a higher price. For example—at present jute is selling at Rs. 2-12 to Rs. 4-8 per maund. But 100 yards hessian which is produced from 24 seers of mixed jute at a value of say Rs. 2-12 fetches Rs. 11-4 i.e. more than 4 times the value of the raw jute. Unless the purchasing power of the people increase through industrialisation of the country—the value of the agricultural produce will scarcely go up. For example—Tea is an agricultural produce. The monthly sale of the tea in Tata's factory and subsidiary industries in Jamshedpur containing about 1 Lac souls is about one Lac of rupees. But we have shewn that the combined population of the three districts of Bengal containing 50 Lacs people do not consume monthly 1 Lac worth of tea. England which is essentially an Industrial country spends annually over Rs. 250 per head over import of food and provision. So the Congress's idea of economic uplift through cottage industries with out-of-date method of 10,000 centuries old and the idea of economic uplift through agricultural uplift are not borne by the actual facts and figures. The method for political salvation of one country may vary in another country but not the method for economic salvation. The main principles of practical

economics which is true of one country will be true in another country. If the purchasing power of the people of advanced nations have increased through industrialisation by the help of up-to-date machineries, the same will be true for India. Two and two will always make four and not three or five. If through mesmerising influence of any big personality or of powerful Government, it appears for some time otherwise—the real truth will assert itself when that influence will go. If Congress does not feel competent enough to change their method of thinking, the best course for India will be to start a separate organisation to deal with this vital problem. It will be the primary duty of the Congress or any other organisation to increase the revenue of the Central Government and when that is done as chalked out in this book it will be an easy task for administration of the country. So long that is not done—a mere change in the Government will not be of much use to India—as India has fully realised that her Ministers could not do much in the Nation-Building departments for perpetual want of funds.

In spite of full support of the people, the foreign import of piece-goods increased during the heyday of Khadder movement and when the khadder movement could not check the heavy importation of the foreign piece-goods—the Congress had to resort to picketting shops selling foreign

Civil Disobedience Movement of the Congress for picketting shops selling foreign piece good by running ladies and gentlemen to court jails is a sickening sight.

piece-goods. But whatever justification there may be for boycott movement of 1905 during the Swadeshi movement in Bengal—it had no justification in the year 1930 and 1931. It is a sickening sight to see ladies and gentlemen courting jails as a result of picketting foreign piece-goods shop—the picketting being made illegal through ordinances. The import of foreign piece-goods was made capital of during boycott movement and again during non-co-operation days when khadder movement could not achieve its end. It is a slur on the intelligence and business capacity of the Indians to demonstrate before the world that India which exports raw cotton and cotton waste to the value of 80 crores to 96 crores a year cannot clothe herself though sufficient protective tariff has been given to the cotton industry by passing the Cotton Tariff Act and that the Congress had to resort to picketting and send their workers to jail to put a stop to foreign imports. Neither the saner minds in India nor the world critics will ever approve of the activities of the Congress in this direction.

The Congress should not have undertaken any anti-mill theory. But when they took it up they should have been consistent with their theory. They should have either avoided riding in motor cars when they are specially products of the foreign factories or they should have started factories in India to manufacture motor cars which they could use. They should

Inconsistency of the Congress method : Chemist's service should have been requisitioned to use it to destroy water-hyacinth of Bengal instead of Khaddar movement.

not have used foreign ships in their sea voyage. They should have started shipping companies for that purpose, or should have used India owned ships. In this way there are hundred and one things they are using which could have been produced in India. Now there are other things which are not less vital for the existence of a nation. The Congress idea of khadder movement possessed the best brains of India, and khadder was meant for economic uplift of India. But if economic uplift be the aim of the Congress how their best chemist we mean Sir P. C. Roy—the pride and glory of India can give up his test tubes to invent some chemical mixture to destroy the water-hyacinth of Bengal—which are yearly destroying crops on over 35 lac Bighas of land and making the once fertile soil of Bengal a desolate country? At a rate of agricultural produce valued at Rs. 50 per bigha of land, Bengal is yearly losing an income of 17½ crores of rupees. If Congress has any soft corner for the peasantry of the country—why their chemist preach khadder for economic uplift leaving the people die of starvation through the depredation of water-hyacinth of Bengal. For chemist of the Congress, which is of more service to the country—khadder or destruction of water-hyacinth?

CHAPTER V

Development Trust—an Antidote to Socialism.

CORPORATE Life for gain can be traced to the instinct of insects such as ants and bees who earn jointly to participate in the gain jointly.

In the prehistoric age as also in the present time traces of corporate life for gain can be found amongst the uncivilised in their hunting expedition or in their warfare with the neighbouring races with the sole object of plunder and loot as we find amongst the present frontier tribes. In a more developed stage of society corporate bodies in the shape of partnership for carrying on business for gain were in vogue from time immemorial. Bigger corporate organisations for business were formed in England in the beginning of the 17th century. Palmer, the reputed authority on the Company's law, says that in England "A Charter of incorporation can only be granted by the Crown, for the constitution of corporations is one of the prerogatives vested in the Crown by the Common Law." This power to incorporate by Charter has

Early history of
corporate bodies
in England.

always been sparingly exercised by the Crown and necessary delay and expenses in the proceedings for obtaining the Charter—concurring with the reluctance of the Crown to grant—has, for many years past, made a Charter a very exceptional mode of incorporation. One of the greatest advantages enjoyed by the members of the corporation incorporated under the Royal Charter—unlike members of partnership business—is that its members were originally under no liability for the debts of the corporation. This advantage was however removed subsequently by a Statute under which a considerable number of Banks and other concerns had from time to time incorporated with a liability attached to the shares in the capital and sometimes with additional liability of the like or double the amount in the event of winding up. Companies formed under the Royal Charter are :— The East India Company, incorporated by Queen Elizabeth, 31st December, 1600 ; The Hudson Bay Company, 1670 ; The Bank of England incorporated in 1674 ; The South Sea Company incorporated, 1711 ; The London Assurance Corporation, 1720 ; Peninsular and Oriental Steam Navigation Company, 1840 ; The British North Borneo Company, 1881 ; The British South African Company, 1889.

Besides the Royal Chartered Corporations, some Companies were incorporated under the special Act of Parliament. Since then, a great number of companies have been constituted and in particular in relation to Railway, Dock, Water-works, Gas-works and Tramway undertakings.

A further groups of companies were started in seventeenth century generally known as unincorporated companies constituted by contract. " It was a time when men of business were beginning to recognise the advantage derivable from co-operation in commercial enterprise, the advantages which it offered, that is to say, on the one hand for raising funds for the purpose of large and more or less speculative undertakings by means of contributions from a number of small capitalists ready and willing to co-operate, and on the other hand of minimising the risk by spreading the liability. The difficulty was how to secure these advantages. A Charter was too costly, and a special Act of Parliament was impracticable. Business men had to devise for themselves a new form of partnership which should possess the advantages as nearly as might be of a Chartered corporation and

in particular should have shares of fixed amount freely transferable by the holders. The outcome of these commercial needs was the unincorporated company, the lineal ancestor of the ordinary company under Companies Act, 1862 and its amending Acts, now reproduced and consolidated in the Acts of 1908 and 1929—says Palmer.

Then come the Companies Acts of 1862 to 1908 (subsequently amended in 1929). This was a master-piece of legislation. The main object was to throw open to all the coveted privileges of carrying on business with limited liability, and the great boon of limited liability was secured by insertion in the memorandum, as part of the name of the Company, of the magic word “ Limited ” and since the passing of the Companies Acts there have been floated thousand and one kinds of companies in the United Kingdom—such as mills, factories, shipping, iron and steel companies, motor car manufacturing companies, Insurance, Banking, Tea, Rubber Companies, etc. and have been trading in or outside England and some of them have been paying good dividend to their share-holders.

Origin of Companies law in England.

So we see how corporate bodies developed in England through successive stages from simple partnership business to Companies Act. With the introduction of improved machinery and steam power, new life was infused in manufacture and other commercial enterprises. There were more demands for workers and the Companies as capitalist concerns used to employ labourers on scanty remuneration and on more hours—so as to enable the companies to pay more and more profits to the share-holders. This was a monstrous inequity of the companies formed under the Companies Act. This principle was followed not only in England but in other parts of Europe and America, where capitalist concerns had been formed and improved machineries were introduced. Against this inequity, Socialism was started which wanted in the early part to bring in a more improved condition of labours i.e. less time, more pay and better treatment from these capitalist concerns. The labourers formed Trade Unions in England. These Associations which in Common Law were illegal as was supposed restraint of trade, were legalised to some extent by the Trade Union Acts, 1871 and 1876. The Companies Acts, 1862—1867 are not to apply to any Trade Union and registration of Trade Union under them is void.

Origin of Socialism in England and in European Countries.

As Socialism developed, they indulged in more fantastic idea regarding Capitalism. Karl Marx's socialism found fault with the employment of improved machineries as labour displacing machineries and enunciated the "theories of crisis" and "surplus value". The socialist from Marx down-wards cry down capitalist concerns and dream of an ideal society where there will be no capitalist concerns but all the capitals will be owned by the labourers. But the saner socialists often preach that the social revolution may come, not as a sudden cataclysm but rather by gradual process of industrial evolution. "They repudiate the dictatorship of the Proleterate, being aghast at the terrible doings in Russia and even disown the revolution, their own child, as an untimely birth, and because it has contrary to expectation, both teeth and claws"—says James Possignol.

Neither the extreme Capitalism nor the extreme Socialism can be the future order of the society. There will be need of Capital and there will be need of labour for manufacture and commercial purpose and one cannot do without the other. The more intelligent labourers will get more

Fantastic
theories of
Socialism.

Neither Capitalism nor Socialism shall be the future order of Society.

remuneration and if they can hoard some wealth they play the roll of capitalist. The Labourer becomes Capitalist ; so we find an engine driver becoming Prime-Minister of England and we know another labourer from Log Cabin to White Hall as President of United States of America.—Carnegie and Ford are not the solitary examples of humble labourer in beginning of life becoming multi millionaires in after life. Instances can be multiplied from the history of the every country illustrating the fact that an humble labourer in the beginning of life becoming millionaire in after life. Now Soviet Russia, a Proleterate state is undertaking manufacture and agriculture through collectivism of firms on a gigantic scale under its Five Year Plan. The pay of the labourers differs according to their qualifications and the administrative officers of the Soviet Russia are employing millions under them. Though, hoarding is not allowed in Soviet Russia yet this principle is suicidal and will in the end defeat the very object of socialism. Mr. Edward Fl. Adams in his book "Inhumanity of Socialism " puts the case very strongly thus "The accumulating man is essential to social saving. Social saving is essential to the support of an increasing population. Therefore socialism by eliminating the capitalist would make

life impossible to many who live now." So far as to Socialism as an antithesis of Capitalism which developed specially through the corporate organisations of the advanced countries of Europe and America. Now let us trace the **corporate Life in India.**

Though before the dawn of European civilization, trade and commerce flourished in India and the Indian sailing vessels used to visit the foreign coasts with mercandise, corporate bodies, excepting the membership being confined amongst one's own family, were not much in evidence in India. The best form of corporate life is found in the Indian joint family system ; and there are still existing joint family business bequeathed from sire to sons, specially the Banking business. Indian manufacture of silk, muslin and other cotton goods and hand loom gunny were the products of the joint family. Save and except the above, partnership business or bigger Chartered or other corporations as we find in England and in other advanced countries were rarely in existence in India. On passing of the Indian Companies Act, 1888 modelled on the English Companies Act of 1862, corporate bodies in India began to

Corporate Life
in India.

grow, and it must be admitted that in the domain of corporate life India lags three centuries behind England and other European countries. The principal reasons lie in the fact, as at present, England had to depend on the foreign countries for its very food and clothing while India had sufficient food and clothing ; it used to sell and export its surplus manufactured goods to foreign countries in exchange of gold and precious metals. So we see that instead of passing through the training period of partnership business, the bigger corporate organisations under Royal charter or special Acts of Parliament, the privileges of forming corporate bodies were granted to India through passing of the Indian Companies Act of 1888 and since then cotton mills of Bombay, Tea gardens and Loan companies in Bengal, Insurance companies in Bombay and other parts of India, Steel factories in Behar, Woolen Mills in U. P. and the Punjab sprung up. Though India began to form corporate bodies in a very later stage, yet the abuses were few and far between, and if statistics are now taken, it will be found that failures are more common among the foreign companies than amongst the Indian Companies. Even in the afterwar floatations the Indians lost more money in the companies started in India by the English

firms than in the Indian concerns. Now let us take a comparative survey of companies started in India and England.

Number of Companies Registered in England and in India.

	<i>In England.</i>	<i>In India.</i>
In 1929	9099	839
1928	9522	726
1927	8850	626
1926	8288	529
1925	8529	472
1924	8464	416
1923	8466	430
1922	8495	496
1921	6834	717
1920	11011	
1919	10725	In 1913-14
1918	3504	356
1917	3963	
1916	3393	
1915	4064	

We have seen how with the development of bigger corporate bodies and with the employment of improved machineries and there with more labourers Socialism developed in England and in other European countries. There are over 6000 companies working in India and the total capital of those companies comes to about 286 crores. The illiterate labourers that are

Number of
Joint-Stock
Companies in
existence in
India with
paid up capital
and labours.

employed in the big organisations comes to about 15 lacs. Already Trade Unions have been formed and there are frequent strikes amongst the labourers for more wages and better treatment. Now it is the next step to develop *Socialism* as we find in Europe. On the one hand the big European firms have monopolised all the countries trade and are making tons of money, on the other hand there is an appalling distress and unemployment amongst the educated youngmen of India. Though there is no statistics of unemployed in India, yet we will not be wrong if we put their figure to 10 to 20 millions unemployed in India who are actually starving without any employment, doles or relief from the Government. The political movement in India is marshalled by this vast army of unemployed who are making any amount of sacrifice for the political advancement of India. Because rightly or wrongly the idea has gained ground in India that unless the present machinery is changed, there is no salvation of the country and solution of unemployment. As a result of the sacrifice made by these youngmen, India is going to get a change in the Government in the shape of new reforms, but it is very dubious whether that will lead to the solution of the most vital problem i.e., economic autonomy of India

and along with it the solution of unemployment problem. A disappointment in this direction will lead to a serious crisis in India. It will be worse than the rank Socialism in Europe. If the European mercantile community as well as the Government be prudent enough they can take the winds out of the sail of political unrest and bring in peace and contentment in the country by helping India to start industries on an extensive scale so that the Indian youths can find employment and the producers of the agricultural goods can get higher prices for their products.

There is another class of corporate bodies that can be formed to carry on business in a limited scope under

Origin of Co-operative Societies.

Co-operative Societies Act which was passed in India in 1912. The genesis of the Co-operative movement can be traced to Germany in the later part of the 19th Century where few indigent people, having been denied individual credit, joined together and established credit on their joint liability. And since its inception it is the more needy and poor class such as labourers and agriculturists of the society that combine for supply of their personal needs and wants on co-operative basis and as such the earning capacities of the Co-operative Societies are very limited and

the general rules of the society lay down that the dividend on the share capital of such societies can not be declared and paid for more than 12 p.c. in a year. These corporate bodies catered for men in lower strata of society but as time rolled on, the middle class people took advantage of this co-operative system and formed various types of co-operative societies.

The main advantages and disadvantages of corporations formed under Joint Stock Companies Act and Co-operative Societies Act, are the following :—

(a) In a corporation formed under Joint Stock Companies Act the liability of the members are limited and the shares can be raised from all classes of people far and near ; and shares are transferable. These are the advantages.

The disadvantages of corporate bodies formed under Joint-Stock Companies Act are

(1) Loss of capital—Indian capital is generally shy. So any loss of capital in any concern reacts on the whole Joint-Stock Companies under Indian management. Principally the loss is due to one or more of the following facts :—

- (a) Through mismanagement
- (b) Through speculative venture
- (c) Through under capitalisation

- (d) Through world competition either by better process of production or by Exchange policy.

(II) Inequitious distribution of profits.

The disadvantages lie in the fact that share capital may be lost through mismanagement and speculation over which the Registrar of Joint Stock Companies have no control, his office is a mere "Post Office" as a High Court Judge said.—If England loses about 60 per cent of the Capital any loss of share Capital of the Indians who are shy of such investment react on the progress and development of joint stock companies in India.

**Total number of Companies in existence and their Aggregate paid up Capital
In England.**

	Number of companies in existence.	Total amount of paid-up capital. (in crores of pounds.)
1929	108,698	£520
1928	105,729	£497
1927	101,931	£485
1926	97,588	£463
1925	95,055	£426
1924	90,918	£418
1923	87,930	£410
1922	87,104	
1921	79,994	£350
1920	79,541	£308
1919	73,340	£280
1918	66,852	£273
1917	66,456	£273
1916	66,094	£271
1915	65,986	£265

The total number of Joint-stock companies in existence in England in the year 1929 are 108,689 with paid up capital of about Rs. 8000 crores. Whereas in India the total number of Joint-stock companies that are in existence are 6919 in 1929-30 with paid up capital of Rs. 286 crores. From the above account it can be seen that if the companies that are in existence in 1915 in England are taken as continuing, there were over one lac 13 thousand new floatations between 1916 to 1929. Total 108,698 companies were in existence in 1929. So there is an average loss of over 60 p.c. of the companies that were started in England between 1916 to 1929.

In case of mill and factory started under companies law—the management appropriate all the profits to be paid to the share holders. The workers and labourers get merely living wages. These are the disadvantages. This can be explained by one illustration :—

“ In the last war—the jute mills of Bengal registered mostly under the Indian Companies Act and some under the English Companies Act made huge profits. But those who primarily contributed and worked for such success, we mean, the jute growers

Inequities of
corporation
formed under
companies law.

Inequities of
Joint-Stock
Companies : an
Example.

and mill labourers are left out of account in distribution of these profits. To an ordinary eye it is a monstrous injustice. But constituted, as the Directors of the mills are, they can not but appropriate all the profits and pay them to the shareholders. Their slogan is to purchase jute at the lowest market price without any consideration of the fact whether the price they dictate gives the jute growers a living wages or any profit and they employ labourers at the cheapest market rate so that the management of the mills would be in a position to pay higher dividend to their share holders. These are the underlying practices and we may call them the principles of the Companies Law and you can not blame the management for that. Our feeling generally goes for the poor jute growers and labourers of the mills but we are helpless. This illustrates conclusively in every point that corporate organisation under the present Companies Act can not satisfy the ever increasing social demands. As a result we find there are strikes amongst the labourers, the management satisfy them by meeting their demands half-way leaving loophole for another strike on some other occasion. Some body may call these strike as disease of the industry ; but we say it is the natural outcome of unnatural adjustment created by the present

day Companies law. The other party is the jute growers ; they grumble, they complain without any effect. These inequities you can not stop so long you worship in the Church of the Companies law. Just as office-jaun has replaced palanquine, and motor-car has taken the place of office-jaun, so the corporate organisations under the Companies law are daily proving that they are antiquated and they have got to play a subordinate part in near future.

In corporation formed under Co-operative Act, the articles and memorandum are supplied by the Co-operative department free of cost and registration fees are not charged. The Registrar of co-operative department takes a paternal care for the development of the society and often advances up to 10 times the original share capital of the society and keeps a strong eye on the management of Co-operative Societies. These are the advantages.

But the disadvantages lie in the fact that share holders are jointly and severally liable for any debt or liability of the society formed under the Co-operative Act.

This scares away the substantial people who are terribly afraid of any investment in Co-operative

society as they may have to pay individually the whole losses of the Society incurred for mismanagement of other members.

This is the greatest stumbling block for formation of Co-operative societies. The dividend again is not very attractive. In case of limited liability Co-operative societies, they do not get financial help from the Co-operative department except against their own assets.

So we see that corporate organisation for business under the present Joint Stock Companies law and Co-operative societies Acts are daily presenting difficulties to ensure all round social well-being specially among its share holders and other workers and as each of the above Acts are labouring under vital defects proving their total inability to cope with the present difficult situation, in the evolution of corporate organisation, some Special Act is a great desideratum.

In the evolution of corporate organisation some new Act is a great desideratum.

If Capitalism is bad, Socialism is no better and offers no panacea to the evils. The remedies suggested by them are worse than the disease. It must be said to the credit of Joint Stock

A new Act viz. Development Trust Act—is a Great necessity for corporate bodies.

Companies that they brought in a period of economic development in the country ; the growth of Joint Stock Companies in any country is a unfailing barometer that augurs the financial well-being of the country and it must be said to the credit of Socialism that they have succeeded in great part to bring in more wages, better treatment to the labourers. But there are vital defects in both the system. So corporate bodies should be formed under some special Act, the Development Trust Act—with the preamble—**it is to develop the resources of the country through corporate bodies for the well being of its workers and co-workers, should be passed.** This Act aims at doing away with the defects of corporate bodies formed under the Joint Stock Companies Act or Co-operative Act as well as giving fitting reply to the “Scientific” socialism preached by Karl Marx and other socialist of advanced school.

Firstly.—This Act recognises the value of capital and as such it reserves to it (a) safety by providing the Government guarantee of return of the capital within 15 to 20 years.

(b) Yearly return on the capital in shape of minimum guaranteed interest of 4 p.c. by the Government.

(c) Further return in shape of bonus upto $3\frac{1}{2}$ p.c. on the profits earned by the corporation registered under the Development Trust Act.

Secondly.—This Act secured to the workers who are generally known as labourers under capitalist corporation, (a) all the profits of the corporation minus the amount that is to be first earmarked for 4 p.c. interest and then (b) for capital redemption fund, (c) the small per cent of the profit that is to be paid to the capitalist in shape of bonus.

(d) Certain per cent in shape of bonus that is to be paid to the registered supplier of raw materials e.g. in jute mill, the actual growers supplying jute to jute mill, under this Act, started in Jute Centres. They may be called the Co-workers.

While the Act secures the safety and return of capital, it pays to the actual registered growers and suppliers of raw materials a bonus on the profit over and above the market price of the commodity whenever possible, and it secured to the workers the balance of the profits of the corporation (in addition to the living wages) registered under Development Trust Act.

Thirdly.—The Act brings in more revenue to the Government in the shape of custom duties

and income-tax—the two principal sources of Government revenue in our country. The income tax should not be levied on the profits of the concerns but on the earning of workers and co-workers.

Fourthly.—The control and management being in the hand of expert business body to be nominated by the Government—the Government having the final say in the management—there will be less abuse and mismanagement. So there is nothing to be grumbled by any party associated directly or indirectly under corporation registered under the Development Trust Act.

We have seen that the total capital investment of the jointstock companies registered in India and working in India is about Rs. 286 crores and the labourers that are employed in those Companies as well as those registered in England is about 15 lacs of people. But the share-holders and management of those concerns absorb whole of the profit the labourers are paid a very small remuneration sometimes only a living wages. But the capital we propose to raise for the corporations under the Development Trust will be Rs. 200 crores for the first ten years from India and if the Native State

Income of
India under
Ten-Year Plan.

come forward another 100 crores can be raised and further sum of 100 crores for the subsequent 5 to 10 years' time in the light of experience we gain in the first ten years. Now the profits earned on the capital of the concerns raised in England as well as in other foreign countries coupled with the income of the management of those foreign concerns go to England and other foreign countries, but the income of the corporations registered under the Development Trust will be utilised in India. If the conversion of raw materials of 150 crores yields on an average price of Rs. 375 crores we may assume that the income of the workers and co-workers will come roughly a sum of Rs. 150 crores, besides opening of new Steel Factories, Ship-building, Shipping, Motor Car Industry, etc. will bring in another Rs. 100 crores to the workers. Besides the freight and fare of the existing shipping companies come to about Rs. 57 crores. If India can capture one half of shipping trade her income on that account will come to about Rs. 70 to 80 crores, add to that the income of the ship building and sugar industry, insurance and other industries will bring to India a sum of rupees not less than 500 to 1000 crores a year. This huge amount will lead to the development of other industries. So we will not be surprised if we find that in course of 10 or

15 years about two crores of its people are being employed directly or indirectly in some business concerns in India, and calculating on an average five per head of the earning member, India will be in a position to support 10 crores of people through industrialisation on a bigger scale.

Utility of Development Trust Act.

Development Trust Act will not only be an answer to Socialism in India and other parts of the world but it will be the principal machinery to start jute mill, shipping, ship-building, steel factories, motor car factories and other industries under Ten Year Plan in India.

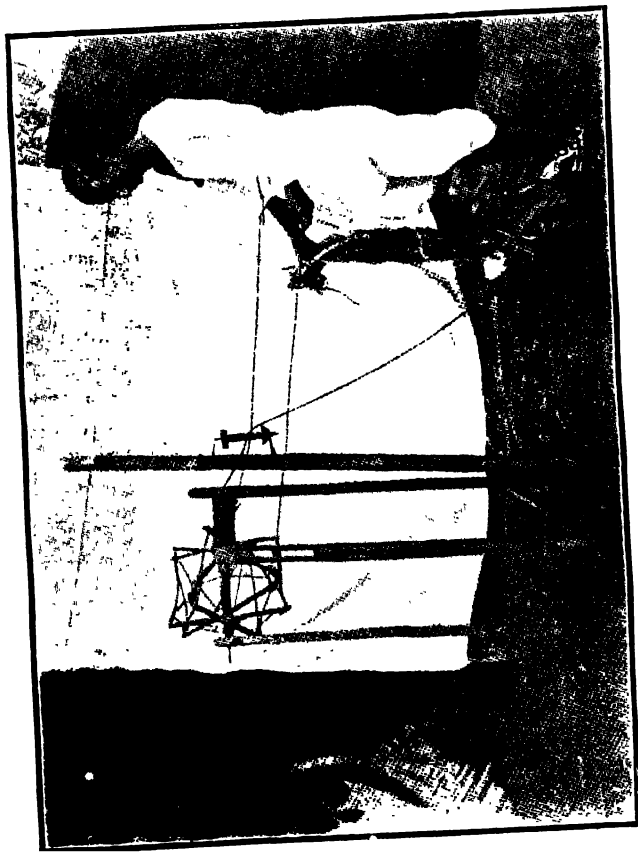
CHAPTER VI.

ROMANCE OF JUTE.

THE value of export of raw jute and hand loom gunny from Rs. 41 lacs in the year 1850—51 to Rs. 96 crores in the year is really a sensational and surprising development. Jute is the greatest economic factor in Bengal with a small portion of Assam and Behar. The rise in prices of jute is synonymous with the rise of purchasing power of the people of Bengal and results in the rise in import while low value of jute means decreasing purchasing power of the people with fall in import. There is no other single exportable commodity in Bengal which has such a tremendous economic influence on the wealth or woe of the people as jute has.

The importance of jute trade of Bengal can be realised when we consider that Bengal enjoys the monopoly of the jute trade of the world. Had there been a Bengal Gandhi, he would have preached first the cult of jute spinning and weaving as a potent means to raise the economic standard of Bengal. So vast are the possibilities of jute manufacture, so unique is the position of Bengal

BEFORE THE MODERN MILLS



INDIAN HAND SPINNING

that it required the brain of Tata to do justice to it. Inclusive of home consumption jute trade alone brings to Bengal a sum of over Rs. 100 crores in good year—while the income out of export of raw cotton and cotton waste is spread all over India specially of Central India and Bombay the whole income of jute is confined to Bengal.

The Early History of Jute Trade.

The jute spinning and weaving by hand was extensively practised by the Bengalees for cordage and cloth for bedding, screens, garments of the poorer classes and for many other domestic purposes from the early part of the last century. "In the early forties the cloth (jute) came to be exported from Calcutta to North America and the Bombay Coast for cotton packing and more extensively as bags for exporting sugar and other produce to all parts of the world"—says Mr. D. R. Wallace.

As to the extensive use of jute and hand made gunny, we quote from the "Fibrous plants of India" an admirable work of Dr. Forbes Royle published in 1855. The following is the vivid picture of the jute industry and the importance it had then acquired in supplying markets outside of India with hand loom gunny cloth and bags.

"The great trade and principal employment of jute is for the manufacture of gunny *chuts* or *chuttees*, i.e. lengths suitable for making bags. This industry forms the grand domestic

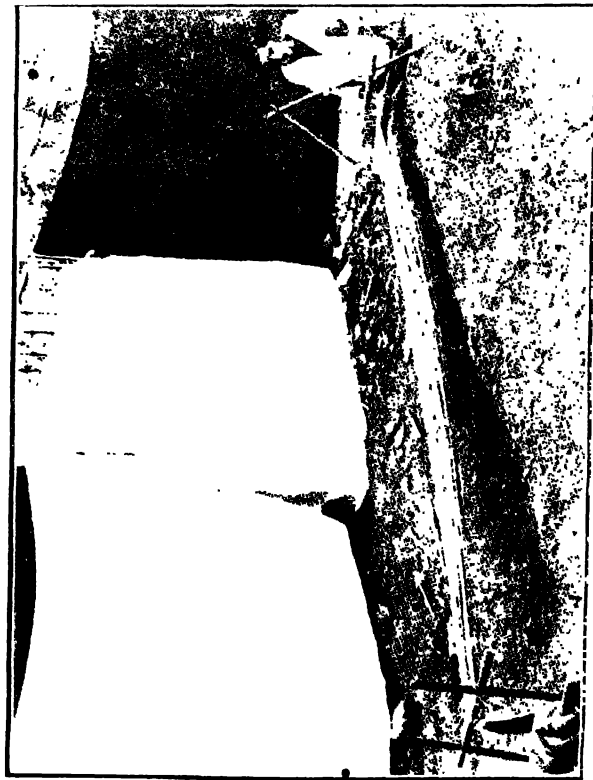
Early jute
manufacture
as a cottage
industry of the
Hindus.

manufacture of all the populous eastern districts of Lower Bengal. It pervades all classes, and penetrates into every household. Men, women, and children find occupation therein. Boatmen in their spare moments, husbandmen, palankeen-carriers and domestic servants ; everybody in fact, being Hindus—for Mussulmans, spin cotton only, pass their leisure moments, distaff in hand, spinning gunny twill.

How Hindu
widows earned
their livelihood
through jute
manufacture

Its preparation together with the weaving into lengths, forms the never failing resource of that most humble, patient and despised of created beings, the Hindu widow, saved by law from the pyre, but condemned by opinion and custom for the remainder of her days, literally to sackcloth and ashes, and the lowest domestic drudgery in the very household where once, perhaps, her will was law. This manufacture spares her from being a charge on her family—she can always earn her bread. Amongst these causes will be discerned the very low prices at which gunny manufactures are produced in Bengal, and which have attracted the demand of the whole commercial world. There is, perhaps, no other article so universally diffused over the Globe as the Indian gunny bag. All the finer and long stapled jute is reserved for the export trade, in which it bears a comparatively high price. The short staple serves for the local manufactures and it may be remarked, that a given weight of gunny bag may be purchased at about

BEFORE THE MODERN MILLS



INDIAN LOOM

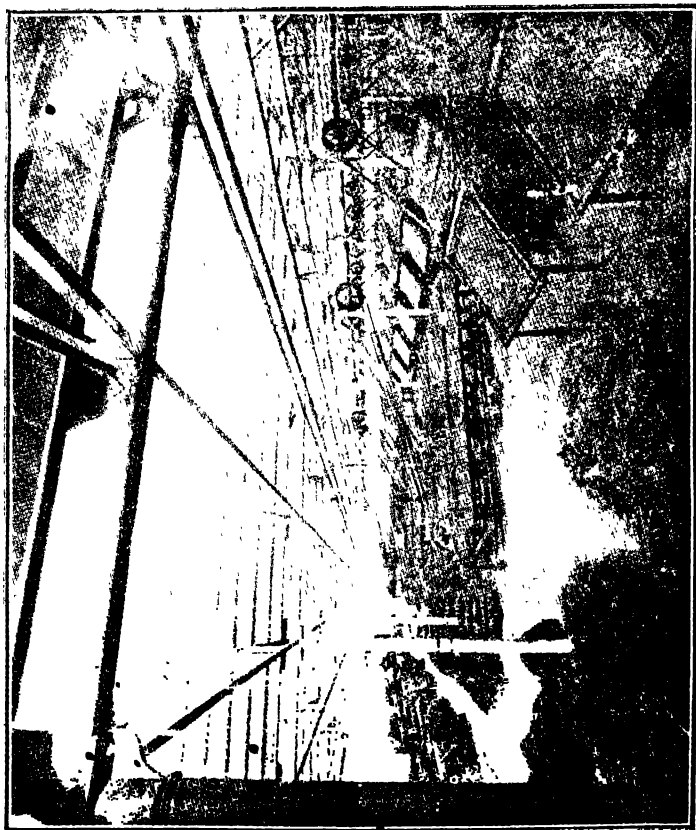
The first experiments made with jute by Dundee spinners on their flax and hemp machinery before the year 1838 were not a success, and in the market quotations of the time—"Warranted free from India Jute"—became a standing condition of business. It may have been that the earlier parcels were not true jute but some of the more inferior fibres allied to it. However, that may be about 1838, fresh trials were made on a parcel of forty tons imported by a sailing ship Captain. These trials clearly demonstrated the adaptability and commercial value of the fibre spun by machinery into yarns for common wrappers and packing purposes and resulted in establishing the Dundee jute industry.

So from 1838 the Scotchmen introduced jute spinning and weaving in Dundee. They were competing successfully with the hand made gunny for cotton packing in Bombay till mill in Bengal was started.

History of Spinning and Weaving Mills in Bengal.

"Fortunes had already been made by Scotchmen in spinning and weaving of jute in Dundee prior to 1855, i.e. during a period of 17 years from 1838. But it was left to an Englishman,

IN A MODERN JUTE MILL



SELECTING, BATCHING, SOFTENING AND CARDING

(Mr. George Acland) in that year to introduce jute spinning machinery to the Hooghly"—says Mr. Wallace.

We find the following from his admirable Book "Romance of Jute."--

"Mr. George Acland began life as a middy. Leaving the East India Marine Service as a young man he turned to commerce in Ceylon, was successful and for some time a non-official member of the Legislative Council there, before he thought of fresh fields in Bengal. He arrived in Calcutta about 1853 and got into touch with the management of the paper works, then at Serampore, where experiments were being tried with country grasses and fibre plants to improve the quality or cheapen the manufacture of paper. Acland's genius caught on to Rhea as a possible rival to flax and hemp. With this in view he secured permission to plant Rhea between Bally and Serampore on the sides of the 'East Indian Railway track, then under construction.

In 1854 he proceeded home to interview machinery makers taking with him some rough samples of Rhea ribbons. His scheme did not meet with much encouragement, and it was his inter-

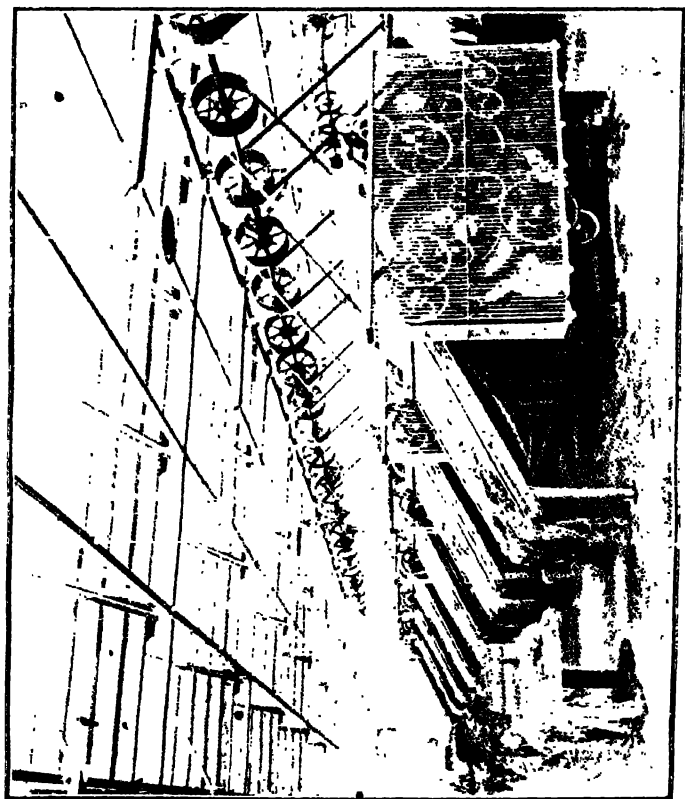
Mr. Acland's
Subsequent
Experiment
with jute—his
initial difficul-
ties and success.

view with Mr. John Kerr of the Douglas Foundry then the leading light in the construction of flax and jute preparing machinery in Dundee, that put him on the tract of jute. After inspecting the Rhea samples, Mr. Kerr said,—“ Though gunny stuff like that could never be worked to compete with flax or hemp for twine or cloth. It would be more practical to take jute machinery to Bengal where the jute comes from and spin it there.” He accompanied Mr. Acland over some of the Dundee jute spinning mills and the interview ended in the placing of orders with Mr. Kerr for a few system of preparing and spinning machinery and getting plans from him for the erection of buildings and driving arrangements.

He returned the same year with his two sons, Charles and Fred, and a few Dundee mill mechanics and overseers the principal being Mr. Finlay, who brought his two boys with him—one of whom John, late of the Hastings Mills still survives and pays us an occasional cold-weather visit.

Mr. Acland himself superintended the buildings on a piece of land at Rishra (the site of the present Wellington Mills) near Serampore, which he had acquired before proceeding to Europe. The land formed part of the Garden House property

IN A MODERN JUTE MILL.



BREAKER CARDS

at one time owned by Warren Hastings. Here in 1855 the first machine spun jute yarns were made. From this modest beginning, giving an output of 8 tons per day, our jute industry has risen, till the year 1909 turns out the colossal figure of 2,500 tons daily or over three times as much as Dundee produces.

About 1857 Mr. Acland introduced a small number of frame hand looms for weaving coarse gunny fabrics to compete with the country hand-made cloth trade. It was left to a later mill, however, to initiate the power loom two years later.

When the mutiny broke out at Barrackpore in 1857 Mr. Acland became nervous about the safety of his property and conceived the idea of soliciting the military authorities to provide an armed guard. With this object he despatched his son Charles with one of the mill assistants to put his request before General Hearsey, then in command at Barrackpore. After hearing their message the General said—"Go back and tell your master there is as much chance of the rebels looting his place as there is of them cutting my throat". The General's assurance was not good enough for Mr. Acland. He hired a number of seamen from the Sailors' Home in Calcutta and

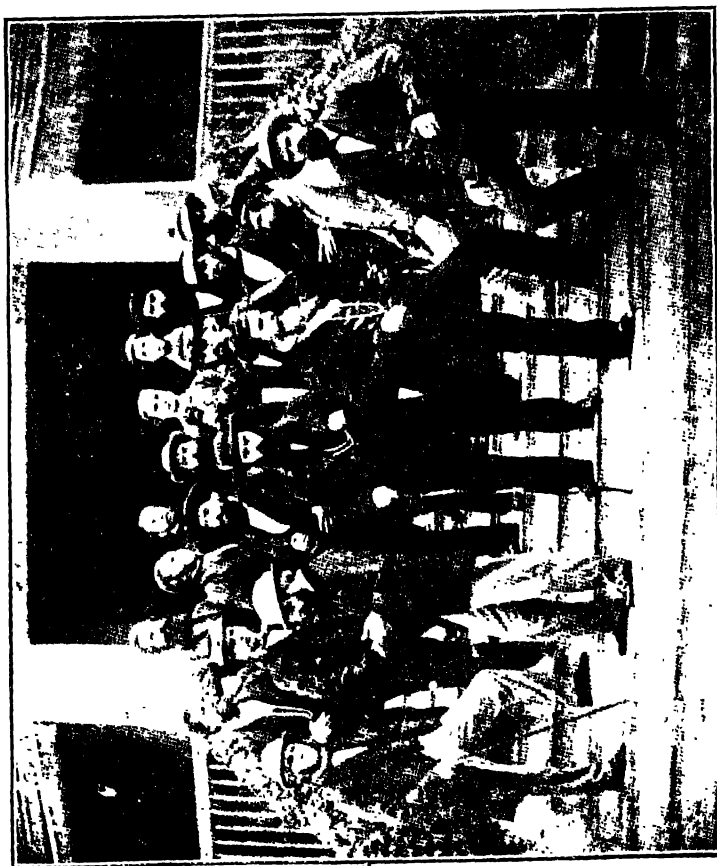
armed them with muzzle-loading shot guns to guard his property along with the European staff of the mill. The company had a spell of good fortune ; but success led to lavish expenditure and it got into serious difficulties about 1867, when Mr. Acland's interest ceased.

The Company was wound up in 1868 and the mill was partially closed down till 1872, when it was re-started and worked with varying success for some years as " The Calcutta Jute Mills Co., Ltd., and latter as The Wellington Jute Mills ", till it was ultimately acquired by the Champdany Company who now work it as their branch mill.

The Barnagore Company and the Power Loom.

In the Mutiny year Mr. George Henderson senior, of the firm of Messrs. George Henderson & Company, while on a visit to Calcutta met the Aclands and there was a chance at one time of his firm undertaking the agency of the Rishra concern. But instead, Mr. Henderson persuaded the Borneo Company, for whom his Calcutta firm were agents and who then had a huge amount of idle capital on their hands, to invest a few lacs in the erection of a jute mill. The Borneo Jute Company which was the first of the home registered companies, started work in the beginning of 1859 and to it is

BARANAGORE JUTE MILL STAFF IN 1862



due the credit of introducing the power loom for jute cloth, just 74 years ago. Having none of the financial difficulties of the Aclands to contend with, they kept going ahead, doubling their works in 1864 and having cleared their capital twice over by 1872, floated their works into a limited liability company, the present. "Barnagore Jute Manufacturing Company Ltd." with 512 looms and a capital considerably over the value of the property. It was the late Mr. Thomas Duff—founder of the firm of Messrs. Thomas Duff & Co., Ltd.—who successfully managed the Borneo Co., in the agents' office during the first 10 years of its existence.

New Mills Erected 1860—70.

About the year 1862 the two doctors' mills were floated, the Gouripore and the Serajunge. The principal promoter of the former was Dr. Barrie, some time connected with Messrs. Scott Thomson & Co., in conjunction with Mr. Smith of the Sugar Refinery, whose property the Gouripore Co., took over. The founder of the Serajunge a home-registered Company, was Dr. Macdonnel, who knew something about tea. The buildings of the latter were wrecked in the earthquake of 1897, when the Company was wound up and the,

machinery brought down to Calcutta in 1899 and erected in the Delta Mills.

The Gouripore Company work an up-to-date oil mill in conjunction with their jute business. The revenue is not shown separately, but the oil material and stocks together with outstandings on oil shipments, aggregating a good round number of lacs in the half yearly accounts, would indicate that the oil department is a remunerative adjunct to the Company.

Next comes the India Jute Mills erected on the site of the old paper mill at Serampore in 1866, really promoted by a Mr. Haworth but with capital provided by the partners of Messrs. Mackinnon Mackenzie & Co.

The building on the India Mill compound, known as the "Friend of India House" was for many years occupied by the Marshman family and it was here that Havelock met his future wife Miss Marshman. The house was considerably altered by the Marshmans and there is a local tradition that the original portion was not unknown to Sir Philip Francis and Madam Grand.

We have now got five mills with about 950 looms at work. Up to this time there was

very little export trade in gunnies beyond Burma. It was not found necessary to be particular about regularity in weights or count of the two or three qualities of bags in use. The buying and selling was beautifully simple, one rupee per inch. of length being the rule for price of D. W. cess and $2\frac{5}{8}$ lbs. twills. But it now became necessary to seek foreign outlets. The Borneo Co. made the first serious attempt about 1868 by shipping 400 bales of their $2\frac{5}{8}$ lbs. twills as $2\frac{1}{2}$ lbs. 3 bushel twill bags to the United Kingdom. The result was disastrous. The bags averaged on arrival anything from 2 lbs. to 3 lbs., the shottings varied from 7 to 10 per inch and the result was a claim of a pound per bale.

How jute
cuttings were
first utilized.

The average price of common to good jute in those days ran from Re. 1-12 to Rs. 3, per maund, the chief supply coming from Serajunge, supplemented with local Dessai. The jute was not so heavily rooted as now, but the mills had not the powerful softners and improved machinery of to-day and were obliged to cut pretty freely. The cuttings were not utilized but were thrown away with the ashes on the river bank. About 1866, however, Mr. Weskin, an Armenian gentleman

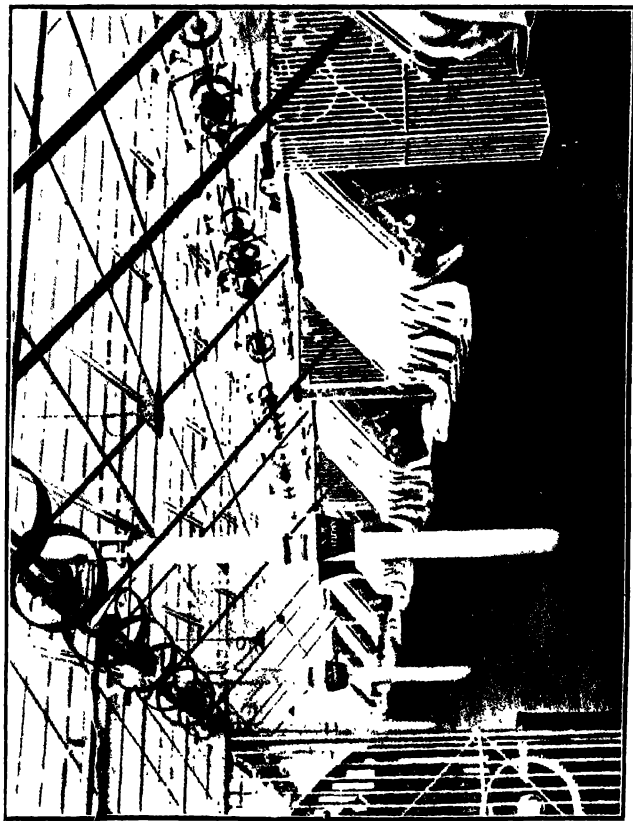
with American connections, who lived in what is now Mulick's Garden House adjoining the Rashmonee temple above Barnagore, persuaded the manager of the Borneo Mills to allow him to have mill's cuttings for the removal of them. Hand-screwed bales of 300 lbs. he shipped to America. The first venture being very successful, he secured other supplies on cheap terms and in a few years cleared enough money to induce him to turn his attention to start a small jute mill in the compound of his house. But meantime he lost his capital in speculations, and the buildings upto beam level, of this abortive attempt to start a jute mill, are still to be seen at the back of the Garden House where he lived.

New Mills and New Markets.

From 1868 to 1873 the five mills excepting the Rishra Mill simply coined money and brought the total of their looms up to 1250.

To illustrate the prosperity of the industry at this period we may take the dividends paid by the Barnagore Company. On the working of their first half year 15 per cent interim dividend was declared, which seemed to justify the enormous capital at which the Company was taken over from

IN A MODERN JUTE MILL



FINISHER CARDS

the Borneo Co., and shares touched 68 per cent premium. The dividend for the first year ending August, 1873 was 25 per cent, for 1874—20 per cent and for 1875—10 per cent. Then came a change. The investing public had forgotten the effect of the Port Canning bubble and the condition of the jute industry in 1872-73 seeming to offer a better return than coal or tea, both of which had just had a bit of boom, it was only necessary to issue a prospectus of a jute mill to have all the shares snapped up in a forenoon.

The Alipore Jail Factory started in 1870 to make wrapper cloth for opium cases and currency bags, does not count, but in 1872-73 three new companies were floated locally the Fort Gloster, Budge Budge and Seebpore; and two home companies the Champdany and the Samnugger—all of which commenced operations in 1874. In 1874-5 eight other mills were² launched—the Howrah, Orienta¹ (now the Union), Asiatic (now the Soorah), Clive, Bengal Pressing and Manufacturing Co. (now the Belliaghatta Barnagore branch mill), Rustonjee (now the Central), the Ganges, registered at Home and the Hastings Mill, owned by Messrs. Birkmyre Bros., of Gourock fame. Thirteen new companies coming on all of a heap and swelling

the total looms from 1250 up to 3,500 was more than the soundest industry could stand. Looking back, it is surprising that the mills did not suffer more than they did during the subsequent ten years' struggle for markets. Excepting the ill-fated Pioneer Rishra Mill, the old companies weathered the stress. But four of the new concerns, the Oriental, Asiatic, Bengal Pressing and Manufacturing Co., and the Rustomjee became moribund to re-appear again, however, later on under new names and management. The Fort Gloster also suffered badly.

The Yankee Instinct.

Some facts and incidents in connection with some of these new companies may not be uninteresting. The first in the field was the Fort Gloster—registered in 1872. The leading spirit in the business was a Mr. Rishard Macallister, at one time a bus conductor in Philadelphia. He came out to the Tudor Ice Company about 1869 and with Yankee instinct decided to have a hand in the golden pie. The Bowreah Estate with the old cotton mill on it, which dated back to 1818 but which had been silent for a long time, was then going a-begging. Macallister formed a small syndicate and acquired this fine property. They

first utilized the old buildings and machinery to float a cotton mill and then launched the jute mill. It began work at the end of 1873 paid a 20 per cent dividend the first year, but for the next twelve years had a very spasmodic career. After being silent for a year or two, when the 100 rupee shares touched Rs. 8, it was restored about 1888 and has done well ever since. While the Fort Gloster Mill was under construction Macallister floated the Oriental (now the Union) at Sealdah. A range of godowns, relics of the Port Canning scheme, were utilized in the building of the mill. This Company, like the Fort Gloster, had a very chequered existence until ultimately taken over by Messrs. Bird and Co., and reconstructed in 1880 under its present name.

Macallister was equally unhappy with his next attempt—the Rustumjee Twine and Canvas Factory, now the Central. The idea was to work a kind of union canvas cloth with flax warp and jute filling. This was another case of many vicissitudes until it came under the management of Messrs. Andrew Yule and Co. with its present name about 1890.

Macallister was a bit of mechanical genius in his way and his daring sometimes resulted in

curious experiments. To give an instance : when the Fort Gloster Mill first started to make $10\frac{3}{4}$ lbs. woolpacks, a large percentage of the packs finished very light in weight. To overcome the difficulty the brilliant idea of making up the weight with sand occurred to him. With the assistance of the mill engineer a mechanical contrivance was rigged up consisting of a hopper fed with fine sand which was run into the mouth of the light packs through a small orifice, into which was inserted a jet of steam to make the sand penetrate the cloth. It is not on record as to whether this device was ever put into practice. But other less ingenious devices for various objects in mill processes have been experimented with in days less remote of which, however, it would be injudicious to say any more.

The Orchard land taken over by Mr. Andrew Yule for the mill at Budge Budge, together with a beautiful villa on the river bank, long known as 'Honeymoon Hall' was a favourite holiday and week-end resort of Chief Justice Sir Barnes Peacock. This house and the still older Bowreah mansion on the opposite side were to the traveller on the journey up the river the first prominent signs of European life and a welcome relief from the dead flatness of the scenery on the lower reaches.

The Asiatic, now the Soorah, was started by Mr. Charles Smith already referred to in connection with the Aclands. He conceived the idea of sending out second-hand machinery to start a small mill. After leaving the Acland's mill he went into business again at Home and got into difficulties, but being very popular with the spinners in Dundee they gave him what he wanted on easy terms. With this second-hand stock, supplemented by a sprinkling of new machinery, all sent out *via* the Cape, he started the construction of the mill at Narcol-danga, partly using old buildings on the property. Smith, being an old man, did not wait to see the mill start, but took his profit from the firm of Jews who had financed him in the venture and retired.

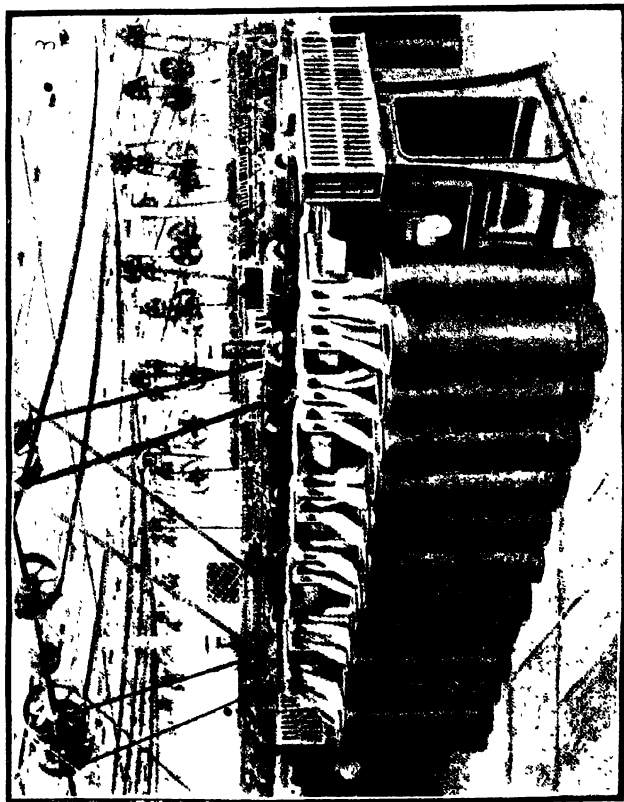
The Rustomjee and the Soorah claim the distinction of having been worked for a term of years under Indian management, the former by a Bombay gentleman named Chuñder Ramjee and the latter by a firm of Marwaris."

From the above accounts we have tried to note the development of the present jute mill industry from hand loom gunny to the present day hessian and sacking manufactured by up-to-date

Prosperity
of Jute Indus-
tries and crimi-
nal negligence
of the
Bengalees.

machineries. We have seen that the Pioneer in the establishment of jute mill industry are all Scotchmen and Englishmen. They took the initiative. They have made the industry a grand success. Beside giving employment to over 3 lacs men in the industry—they have made Calcutta what it is at present principally through jute. They have given Central Government good income in shape of Income tax, and jute export custom duties—they have given opportunities to Marwari and other people to make good income from jute and in dealing jute shares. But they have not done anything to jute growers—the persons whose labour and sufferings contributed primarily to the success of jute trade—rather the organised attempt of the jute mills was always directed towards keeping down the price of the jute. If these jute mills had been under the management of the Indians, they would have meted the similar treatment to the jute growers. Even in war time when these jute mills were making fabulous profits, the price they paid to the jute was abnormally low. The wages to the labourers were increased, but there were no improvement in prices of jute. The jute mills of Bengal in their treatment to the jute growers followed the maxim 'Nothing unfair in love and war.' Barrin^g the

IN A MODERN MILL



DRAWING FRAMES

treatment towards the jute growers, we think Bengal should be grateful to these mill owners as they have shewn us the possibility of jute manufacture and if they did not come in the field Dundee and foreign mills would have done all the manufacturing works ; because the Bengalees, inspite of all the demonstration of jute mill prosperity before their eyes from the year 1855 are busy otherwise. A nation whether they be Hindu or Mahomedan, Christians who can be blind to this development for nearly three quarters of a century cannot but be a backward nation,—inspite of all its so called intelligence. Start any movement social, political or communal, there will be no dearth of men, there will be no dearth of press campaign, no dearth of capital or literature—every one will try to join the movement and try to out-bid others—this is the history of Bengal close upon a century. Let not young Bengal repeat that history again. The first and foremost problem for young Bengal is bread problem. Solve that problem first and then put your hands to other movements. Any political or social progress pre-supposes the existence of the nation, when their very existence is threatened—it is idle to dream of any other movement, but economic. Some may say that we are arguing in a circle. Swaraj should come before any industrial development.

But the development of cotton mill industry in Bombay, steel industry in Tatanagar, jute industry in Bengal and other industries in other parts of India are reply to those critics. Try to get as much as you can from the Government in the shape of financial autonomy, but let that not stand in the way of starting jute mills and other industries. The attention and activity of whole India should be devoted towards the economic regeneration first if they want to survive as a nation.

Jute Manufacture as Career of Young Bengal.

We have seen that out of the average yearly product of 1 crores of bales of jute the consumption of the present looms is about 56 lacs—the figures of the last two years (being abnormal years are not taken into account) leaving about 44 lacs bales of raw jute mostly for export to Dundee, Humburg, Japan *etc.*, and other parts where the raw jute is principally converted into Gunny and Hessian by jute mills and partly for storage. Now Bengal can start jute mills to convert 44 lacs of Bales to Hessian and Sackings as are required by the respective countries which are importing the raw jute. To convert 44 lacs of bales Bengal will be requiring at least further 50,000 looms with adequate number of spindles. As the world consumption of gunny and other jute manufacture is daily increasing as is evidenced by growth of looms in India and foreign countries in near future there will be more demand for jute manufacture. Jute is grown in the following districts:—

Districts, where jute is grown.				Normal area (average of preceeding 10 years from 1909 to 1919).
1.	Mymensingh	...	...	707,700
2.	Dacca	...	...	185,000
3.	Tippera	...	...	26,000
4.	Faridpur	...	...	125,000
5.	Rangpur	...	...	303,000
6.	Farnea	...	...	210,000
7.	Pabna	...	...	180,000
8.	Jessore	...	...	123,500
9.	Rajshahi	...	...	86,200
10.	Bogra	...	...	115,000
11.	Nadia	...	...	49,400
12.	24 Parganas	...	...	76,600
13.	Dinajpur	...	...	116,500
14.	Backerganj	...	...	22,000
15.	Goalpara	...	...	42,400
16.	Noakhali	...	...	26,000
17.	Jalpaiguri	...	...	106,300
18.	Hooghly	...	...	38,400
19.	Malda	...	...	33,000
20.	Sylhet	...	...	16,000
21.	Khulna	...	...	18,300
22.	Murshidabad	...	...	39,800
23.	Cuttack	...	...	16,400
24.	Kamrup	...	...	8,100
25.	Midnapur	...	...	10,400
26.	Nowgong	...	...	5,700
27.	Howrah	...	...	42,100
28.	Darrang	...	...	7,000
29.	Burdwan	...	...	16,500
30.	Garo Hills	...	...	4,100
31.	Balasore	...	...	2,800
32.	Champaran	...	...	1,900
33.	Muzaffarpur	...	...	1,700
34.	Darjeeling	...	...	2,900
35.	Sonthal Parganas	...	...	3,000
36.	Bhagalpur	...	...	1,257
37.	Sibsagar	...	...	300
38.	Cachar	...	...	300
39.	Chittagong	...	...	200
40.	Lakhimpur	...	...	200
Bengal				2,643,800
Bihar and Orissa				246,100
Assam				84,100
Cooch Behar				.....

From the above it is found that 25 districts are producing decent quantities of jute, an average 4 mills can be started in each District. The district producing more jute can have more than 4 mills while district producing less jute with less number of mills. If the size of each mill be of 500 looms, it would be required to start 100 new jute mills in the jute centres or around the jute centres of Bengal and on an average each loom employing 6 men, Bengal can find employment by and by in course of 10 years' time about 3 lacs young Bengalees. From 1900 to 1925 the looms in India have increased from 7000 to over 49000 ; and there is necessity of another 50,000 looms to convert the raw jute, now exported, to gunny. So it can be fairly anticipated that with the more world demand for jute manufacturers India will require in another 25 years 150,000 looms inclusive of new 50,000 looms for 10 years under the Development Trust if the progress of increase be at least twice that of 1925. So Bengal can provide another 6 lacs middle class youngmen in course of 25 years time. **As to the income of the new jute mill we can cite here the average income earned by jute mills during the following period—**

**Prices of Jute, Hessian Cloth and Gunny Bags at
Calcutta Market.**

Year.	Price of Jute 'M' Group Medium Quality.		Price of Hessian Cloth 10½ oz., 40", per 100 yds.		Price of Gunny Bags No. 2 Twill, 44" 26½ per 100.	
	Jan.	July.	Jan.	July.	Jan.	July.
	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.
1919	77 0	81 0	21 0	28 0	58 0	61 0
1918	37 0	43 0	49 0	45 0	68 0	67 0
1917	53 0	40 0	17 8	18 0	44 8	43 0
1916	48 8	48 8	19 4	17 4	43 0	40 8
1915	42 0	48 0	11 0	22 0	34 0	40 0
1914	48 8	67 0	17 0	13 8	42 8	42 8
1913	60 0	69 0	17 8	17 0	39 4	39 0
1912	48 0	49 8	12 0	15 4	36 0	36 8
1911	50 0	54 8	10 0	11 12	30 0	32 12
1910	32 0	33 0	9 3	8 11	28 8	27 4
1909	33 8	30 0	10 0	9 4	29 4	26 4
1908	36 0	39 0	11 0	11 5	33 0	28 8
1907	58 4	45 8	15 2	14 12	33 12	37 0
1906	45 4	67 4	11 10	14 2	31 14	31 8
1905	33 0	40 0	9 14	11 2	27 0	24 8
1904	31 8	33 0	9 14	9 14	23 8	24 4
1903	33 0	34 0	9 8	10 0	21 0	21 8
1902	28 0	34 0	9 12	9 12	21 4	20 4
1901	30 0	34 8	11 0	11 12	23 0	22 12
1900	32 8	35 0	10 12	10 6	25 8	22 0
1873			March		March	
			11 0		22 0	

From the above it is found that the difference between the price of raw jute and the price of

Hessian varies from two times to nine times. We take four times as the average rate. The present price of jute varies from Rs. 2-12 to Rs. 4-8; on an average 100 yds. Hessian is manufactured from 24 seers or 48 lbs. raw jute. So 24 seers of jute—a mixture of different qualities—which is valued at Rs. 2-12 can when converted to Hessian brings in a sum of Rs. 11-4. For calculation purpose 10 p.c. Rejections, 80 p.c. L. R. and 10 p.c. X. L.R. may be taken for manufacturing Hessian.

So from this we find that on an average each bale of raw jute brought in a price of Rs. 100 when converted into manufactured goods. Then the cost of manufactured goods is the value of raw jute plus the cost of labour and management charges and plus the cost of power. Calculating 5 per cent on the profit as the cost of wear and tear of the machinery and deducting 25 per cent as the value of the raw material, we get 70 per cent as the income for labour and management charges and interest on capital and cost of power and dividend to share holders. This is the calculation of the present jute mills constituted under the Joint Stock Companies Act either Indian or English. But the future jute mills that would be constructed

IN A MODERN JUTE MILL



GENERAL VIEW PREPARING AND SPINNING

and registered under the Development Trust Act or similar other Acts would dispose of their income in different ways. Now let us take a concrete case of a Jute Mill started in one of the Jute centre in the Muffusil. The average mill will consist of 500 looms. The cost of construction of a mill of 500 looms will be on average at the rate of Rs. 8,000 per loom will cost about 40 lacs of rupees. Under Development Trust the whole of capital can be subscribed by public on a minimum guarantee of 4 per cent interest by the Government. So the interest of Rs. 160,000 (one lac and sixty-thousand rupees) should be the first charge on the income of the Jute Mill. Thereafter a capital redemption fund of 5 per cent on the profit will absorb another 2 lacs a year—this amount if compounded at 4 per cent interest will pay off the capital in course of 15 years' time. Next will come the claim of say $2\frac{1}{2}$ to 5 per cent of the profits for the jute-growers that they may get in addition to the market prices of jute another sum say from As -/8/- to Re. 1/- per maund. The average yearly consumption of 500 loom-mill will be 44,000 bales of jute. The average figure of the ten years shows when each bale of jute is converted into gunny and hessian, it fetches Rs. 100 per bale. So the income of the

manufactured products of 44,000 bales of jute can be taken as 44 lacs of rupees.

As to the value of the raw product, i.e. Jute, when this jute mills would be started in jute centres, steps should be taken that the actual growers can supply jute to the jute mills ; and the middle man is excluded. Now the jute which is brought to Calcutta mills passes through several middle men and brokers. Besides the freight on raw produce is heavier than freight on the manufactured goods. So the jute that is sold in Calcutta mills at Rs. 6 the actual growers never get more than Rs. 4⁸/₈/- to Rs. 5 per maund. This will be distinct advantage for Moffusil mills.

Technical knowledge of Jute mill manager.

In producing gunny or hessian—the batching is made by mixing different qualities of jute of different prices. It will be necessary for Moffusil mills to import from other districts some jute of different qualities to get the batching in proper form. Here demands the best technical knowledge of a jute mill manager. He has to exercise his brain how to supply the foreign order at a profit and the different qualities of jute are mixed accordingly. On an average a given weight of jute produces the equal weight of manufactured goods.

But in batching usually 4 p.c. is off in dust and impurities, in spinning $2\frac{1}{2}$ to 3 p.c. the weight is reduced and in weaving 1 p.c. is reduced—total reduction is about 8 p.c. But this is compensated in the following ways :—

First—Utilising dust in breaker 3 to 4 p.c.

Secondly—Some p.c. is gained in starching the manufactured goods.

Thirdly—The balance p.c. is gained by watering through straightening machine. If the mill manager can show 1 p.c. more on the given weight raw materials—it is a credit for him.

The jutes that are supplied in drums to the Calcutta mills often contain moisture and other impurities. But the growers being the registered suppliers to the Moffusil mills will find no opportunity to adopt that malpractices.

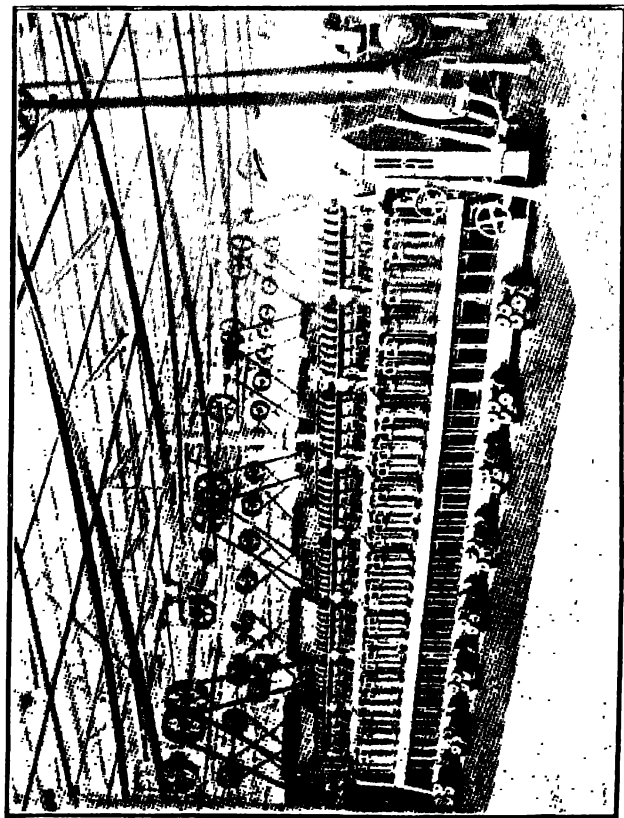
So it can be fairly assumed that the batching of a bale of jute in Calcutta which costs Rs. 30, at Rs. 6 per maund can be had at Moffusil mills at Rs. 25 i.e. average Rs. 5/- per maund. It must be noted that different grades of jutes some at Rs. 7/- some at Rs. 6/- some at Rs. 5/- and some at Rs. 4/- are mixed together for batching purpose. Now let us allocate the different heads of expen-

ditures in jute mills 500 looms started under Development Trust Act.

	Rs.	Value of manufactured goods. Rs.
Cost of 44,000 bales of jute at Rs. 25 per bale a'	1,100,000	44,000,000
Cost of electric power at about 2½ p. c.	110,000	
Cost of allowances to the 3000 workers—on average of Rs. 500 per worker	1,500,000	
Cost of freight of manufactured goods from mills to Calcutta port at ½ p. c.	22,000	
Cost of freight for materials from mills site at ½ p. c.	11,000	
Cost of interest at 4 p. c. on 40 lacs payable to Government	160,000	
Cost of capital redemption fund at 5 p. c. compounded at 4 p. c. repayable in 15 years time	200,000	
Cost of Insurance at ½ p. c.	22,000	
	<hr/> 31,25,000	

Over and above this, an additional ½ per cent on the invested capital will cost in the first five years Rs. 20,000, in the 2nd five years at 1 per cent. Rs. 40,000, in the 3rd five years at 1½ per cent. Rs. 60,000. So we see that there is a surplus of about 13 lacs to be distributed in the following way:—5 p.c. to jute-growers that is 2 lacs, the jute consumed in the mills are 44,000 bales.

IN A MODERN JUTE MILL



ROVING FRAMES

220,000 mds. they will get about 1 rupee as bonus, $\frac{1}{2}$ p.c. to capital, Rs. 20,000 and keeping in reserve about $2\frac{1}{2}$ p.c. say 1 lac we can distribute the balance of 10 lacs to the workers out of it 1 lac should go to provident fund of workers and 9 lacs to be distributed amongst the Workers at the average rate of Rs. 300 making the total average income of 3,000 workers at Rs. 800 a year, which in all probability rise to Rs. 1000 to Rs. 1,200 a year.

So if the 44,000 bales that are converted into manufactured goods are sold Rs. 72, instead of Rs. 100 still the mills can meet its own ways. Any sum over and above Rs. 72 goes direct to pay yearly bonus to workers and co-workers.

In this connection it must be remembered the value of the gunny or *chat* that was produced in hand-looms in Bengal. Dr. Forbes Royale says in his 'Fibrous Plants of India'—"that a given weight of gunny bag may be purchased at about the same price as a similar weight of raw material leaving no apparent margin for spinning and weaving." Now that given weight of jute produces given weight of manufactured goods, *i.e.* one bale of raw jute produces one bale of manu-

Development
of Industrial
Colony

factured goods but the price varies sometimes ; the value of the manufactured goods is about 4 times the value of the raw goods. Any further reduction in prices of manufactured goods will mean further reduction of allowance of the mill staff ; but that will also mean less cost for jute. So it would be the earnest desire of each worker of the jute mill to produce the gunny at a cheaper rate so that they may enjoy the fruit of their labour. And the jute growers—whom we may call the co-workers will participate in the profits of such jute mills which will mean an additional income from As. -/8/- per maund to Re. 1-8 per maund. We can dream of an ideal state in the industrial colony under Development Trust backed by Government guarantee. There will be no cause of strike as the workers are the real proprietors in the sense that all profits after meeting small financial commitment go to their pockets. Now consider the stupendous possibility of having 4 or 5 jute mills in each district of Bengal. 3,000 educated and half-educated youngmen of middle class and along with them at the rate of 5 members to each earning man there will be 20,000 population in and around a jute mill colony. This will necessitate opening of Municipality, College and School for both boys and girls and other subsidiary industry along

with it. In fact each jute mill Industrial Colony will be at least as big as a middle sized District Town Head Quarter.

Jute Mill Industry and its Influence on the Indian Public.

A success of jute mill industry in the Moffusil will create a very interesting and sensational development in the economic outlook of the country. The present day feeling of no-confidence in the activity of the Indian will go and in its place we will find robust optimism in all that is done. The dark disappointment that dogs the footsteps of almost all the graduates will disappear and they will find their existence worth living for something higher and nobler.

The dynamic force of success of jute mill in
How Jute Industry can help other Industries. jute centres will electrify the activities of the Bengalee in all other spheres. Considered from the Insurance standpoint it will give fresh business of 30 crores of rupees to the existing Life Insurance Companies, calculating Rs. 1,000 insurance per head of 3 lacs workers. Paper mills, banks, iron factories, electrical goods and wireless will grow along with it and other industries will develop as we find in Tatanagar or in Bombay.

There is another distinct political feature of the show ; these youngmen will be law abiding citizen, and being conscious of the benefits given by the Government in helping to start the Industrial Colony—they will be naturally grateful to such Government. In fact it is a moral conquest which every civilized Government who want to rule with the consent of the people should aspire after. It is needless to add that the Ordinances or any other Emergency Acts will never inspire any feeling of goodwill towards the Government. We have shown elsewhere that the Government will be direct gainer in helping to start the industries under Development Trust. Now let us see the positive gain of the Government in giving guarantee of 4 p.c. to 40 crores capital invested in Jute Industries.

Political feature
of success of
Jute Industry.

1. By Way of increased Custom Duties.

The custom duties realised on raw jute of 44 lac bales comes to Rs. 1 crore 95 lacs a year—, whereas the custom duties on manufactured goods if 75 p.c. is converted to Hessian and 25 p.c. is converted to sacking will be 2 crores 32 lacs at least Rs. 37 lacs by way of custom duties will be a gain.

2. **The income-tax**—and super-tax derived from the shipper of raw jute will greatly increase in the present mills. If income-tax is not charged on the profits of the mills as in Co-operative Department but on the individual income still income of the Government under income-tax will be greater. So it can be anticipated that Government income through custom duties and income-tax will be increased.

3. Besides the direct gain—there is an indirect gain of the Government as the purchasing power of the people and the jute growers will increase it will mean more import and this will mean more income of custom department.

**How Jute Manufacture is Possible in form of
Cottage Industry.**

If cottage industry is run as an adjunct to mill industry on up-to-date machinery—the power and weaving materials being supplied from mill there is a possibility of running cottage industry at a profit. When Jute Mill will be started in Jute Centres—if an arrangement is made for Electric installation which will not only supply power for the mills but for looms in adjacent villages, simply for weaving purpose—Bengal can employ a good number of female and male workers

in such looms. The writer placed the proposal before some Jute Mill Managers and one Scotchman who was a director of Scotch machinery company happened to be in the meeting. They approved of the idea of the writer and advised the writer to "make an experiment first which they thought would be a success. They remarked if the experiment be successful it would create a revolution in textile Industry not only in India but all the world over.

Location of Future Jute Mills.

The jute mills can be started in the jute districts in or near jute centres. The number of mills in each district will vary according to the proportion of its jute supply. But it may happen that owing to favourable transport facilities and other advantages, the district supplying less jute may have more mills.

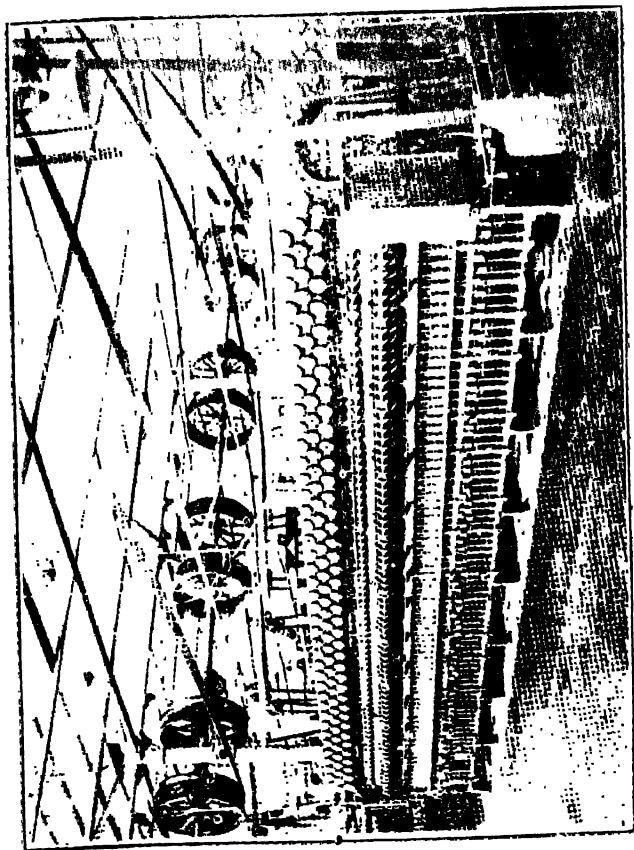
How to secure the entire supply of raw jute now exported for the future mills.— Raw jute is sold to parties who pay better price for the same. The jute is bought in the open market and the prices vary according to demand and supply of the shippers and Indian Jute Mills. Now when a third party in the shape of jute mills in the Moffusil will come in the field naturally the

price will go up and there may be unfair competition which from the point of view of jute mill industry will not be paying. The world demand for jute manufacture either Hessian or Bags depends on its first necessity, second purchasing power, third the value of the manufacture being such that can be favourably compared with similar goods made of cotton or in some cases paper. Any abnormal rise in prices of jute making the jute manufacture costly may react on the whole industry. The only solution to the problem lies in raising the present export duties on raw jute in such a way that the foreign importers of raw jute cannot stand in competition with the manufactured goods of the Indian Mills. But there is danger in the fact that if on raising high export duties on raw jute the shippers are to go—the jute growers will be left to the mercy of jute mills—the sample of tenderness they showed during War period when there was less export of raw jute is still in their memory. These jute mills will dictate any price and the value of raw jute will go further down. If any duties on raw jute are enhanced without corresponding safeguard for jute-growers, the position will be worse. The only safeguard for jute-growers in that case will be a minimum price fixed by the

Minister of Industries which besides the cost of production of raw jute will give some margin of profit to them. Again if the foreign jute mills are to close for want of raw jute from Bengal, the existing jute mills will vie with one another to increase their looms as well as working hours. So the purpose for which the duties is raised namely to employ 3 lacs young men in Bengal for gunny manufacture will be defeated. If any duties be raised, it must be done on direct and binding understanding between the present jute mills,—that they will not be allowed to increase their looms neither they would be allowed to work more hours than limited hours a week. So any raising of duties on raw jute pre-suppose the following conditions.—

(a) A fixed minimum price on raw jute should be settled by the Minister of Industries in consultation of Agricultural Department in each year making it punishable for buyer to purchase jute at less price. There will be then less speculation in jute trade and the uncertainty as to the price will disappear. With better value of manufactured goods—the price of jute will go up. This will have a *steady* effect on the whole trade and there will be less handling by middlemen. In this respect the examples of Japan Government

IN A MODERN JUTE MILL



SPINNING FRAMES

towards her rice product and that of the American Government towards her wheat and cotton products can be followed in India.

(b) By limiting the number of looms and curtailing the working hours the existing mills will not be in a position to consume more than 56 bales of raw jute in each year. In case of emergency, such as war, special facilities for extension of working hours can be allowed.

(c) Thirdly any unfair competition, regarding the purchase of raw jute and selling manufactured goods, with the future mills of Bengal under Development Trust Act should be tabooed.

We don't suggest that the duties on raw jute should be increased along with starting of jute mills under Development Trust Act but any higher imposition of duties will have to be done after thorough and proper enquiry.

Better condition of the present Jute Mill Industry on starting new mills under Development Trust.

The jute manufactures of the present Indian mills are encountering unfair competition with the Jute manufactures of foreign mills. The Indian Trade Commissioner at Hamburg recently reports that there is a distinct fall of Indian Imports of Jute Bag in Germany owing to the competition of Dutch Jute Bag. Again Japan wants to compete, even in the Indian markets, with the Indian Jute Mills by their cheaper Jute manufacturers. The present Jute mills will stand at a par and in all

probability, in a vantage position with the proposed new jute mills. So, they for their very safety, should encourage the development of the new mills under Development Trust. So that Bengal can consume the entire stock of raw jute now exported.

LIST OF LOOMS AND SPINDLES AT DIFFERENT PERIODS.

	Sacking.	Hessian.	Total.
	1859	..	192
	1869	..	950
	1873	..	1,250
	1877	2,948	3,858
	1878	..	3,858
	1879	..	4,572
	1883	..	5,396
	1884	..	5,691
	1885	4,900	6,700
	1887	..	7,200
	1890	5,359	7,659
	1892	..	8,195
March	1895	..	9,536
December	1895	6,584	9,701
	1897	7,478	12,984
	1901	8,613	15,213
	1902	8,316	16,517
	1910	13,421	31,755
	1920	16,124	40,477
	1927	19,355	50,354

Total Spindle. •

Sacking and Bagging Weft .. 1,201,510

Sacking and Bagging and Hessian

Warp & Weft .. 937,500

1,058,010

Capital for the Jute Mills.

We have shewn that the capital that would be required to start 100 Jute Mills of 500 looms each in, or near jute centres will be 40 crores of rupees at the rate of Rs. 8,000/- per loom. This will include the construction of mills, and power house purchase of lands and construction of dwelling houses for the workers as well as the working capital. In the jute mills owning about 50,000 looms that are started near about Calcutta, the total capital invested inclusive of the debenture is not more than Rs. 20 crores. Instead of cooly shed in the present mills we will have to erect decent dwelling houses or bungalows for the workers. The erection of, on an average of 10 jute mills of 500 looms a year, will cost about Rs. 4 crores and in ten years' time the 100 mills will cost about Rs. 40 crores. Only a Government guarantee of minimum 4 per cent interest with an addition of $\frac{1}{2}$ per cent in the first five years out of the profit of the jute mills and 1 per cent in 2nd five years and $1\frac{1}{2}$ per cent in the third five years can raise this requisite capital for the jute mills.

Now let us see whether Government loses anything by this financial commitment of 4 per

cent interest—*i.e.* a little over $1\frac{1}{2}$ crores of rupees a year on Rs. 40 crores capital for jute mills.

At present the Government is getting the following export duties.—

TARIFF SCHEDULE.

Jute and other than Bemplipatam Jute.

1. Raw Jute	Duty.
(a) Cuttings	Per Bale of
	400 lb. Rs. 1 4 0
(b) All other descriptions	„ „ 4 8 0
2. Jute manufactures when not in actual use as coverings, receptacles or bindings for other goods :—	
(a) Sacking (cloth bags, twist, yarn and twine)	Per Ton of
	2,240 lb. „ 20 0 0
(b) Hessians and other description of Jute manufactures not otherwise specified	Per Ton of
	2,240 lb. „ 32 0 0

**20 YEARS FIGURE OF JUTE PRODUCTION, MILL
CONSUMPTION & EXPORT OF RAW JUTE
IN LACS OF BALES.**

	Production.	Mill consumption.	Export.
1913-14	89	45	43
1914-15	104	49	30
1915-16	73	58	32
1916-17	83	57	28
1917-18	89	54	18
1918-19	70	51	22
1919-20	85	52	34
1920-21	59	56	23
1921-22	40	44	30
1922-23	54	47	29
1923-24	84	51	38
1924-25	81	57	39
1925-26	89	55	36
1926-27	121	55	45
1927-28	102	58	49
1928-29	99	60	49
1929-30	103	64	45
1930-31	112	46	34
1931-32	55	43	31
1932-33	58	44	35

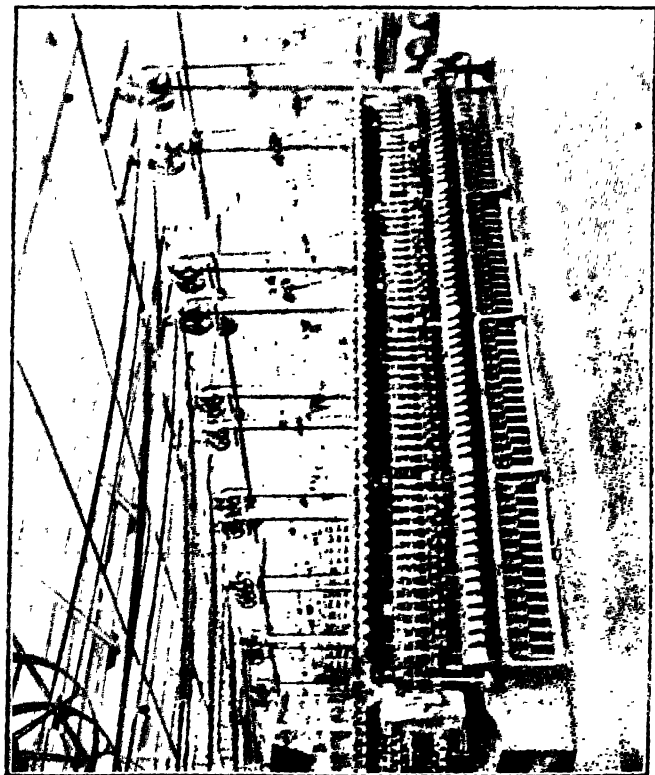
**EXPORT DUTY ON JUTE AND JUTE MANUFACTURE
IN CRORES OF RUPEES.**

	1927-28	1928-29	1929-30	1930-31	1931-32
Jute Raw	2·18	2·11	1·98	1·48	1·44
Manufacture					
Sacking	·98	·89	1·07	·82	·72
Hessian	1·42	1·20	1·60	1·13	·93

So we find from the above export figures of raw jute for the 5 years that on an average Bengal exported raw jute of [41 lac Bales and India Government earned by way of Export Duty on raw jute on an average of 1 crore 83 lacs of Rupees a year ; if through market demand out of 44 lac bales of raw jute 75 p.c. are converted in Hessian and 25 p.c. in Sacking and the net-gain to the Government will be about 37 lacs of Rupees a year in the shape of the export duty. And if out of 3 lacs employees of the Jute Mills if 25 p.c. of employees get more than Rs. 100 a month, the income-tax can be levied on 75,000 workers and if the average pay of the upper class workers be Rs. 200 a month Government will get by way of income-tax another sum not less than another 60 lacs. So by way of increased custom duty and by way of increased income-tax—the net-income of the Government will be about 1 crores of Rupees and if the Government gives the minimum guarantee of 4 p.c. to the investors—the increased revenue can cover the interest of 25 crores of Rupees which is sufficient to start 62 new Jute Mills of 500 looms each in and around the jute centres under the Development Trust.

As to the constitution of jute mills under Development Trusts Act—One expert Jute

IN A MODERN JUTE MILL



WEFT-COP MACHINES

Manager in charge of all the jute mills in Bengal to be called Commissioner assisted by 5 to 7 Directors nominated by the Government from the jute mill management and other business will serve the purpose. The mistake, the Government committed in the appointment of Registrar of Co-operative, should not be repeated here. Co-operative is more a business concern which demands a thorough going business man to be put in charge of it. Instead of that we are having an official with the disastrous result specially in Bengal known to all—just as a man wants to turn a tame horse accustomed to drive an office jaun to a race horse. Development Trust concerns being out and out business concerns must be managed by experienced business men in the line. The pay of the *Commissioner* must be sufficiently attractive to draw the best man in it and we think a starting pay of Rs. 5000 a month will not be too much for the post. As the mills will develop the pay should be increased by and by to Rs. 10,000 a month. The pay of the *Commissioner* as well as his staffs and officers and Audit Department in Calcutta should be borne by the Government in view of the benefits it gets from the export duties of jute.

As to the Mill Manager—We think expert mill manager should be selected for the post with the contract for a period of 3 years. As the average pay of a good mill manager should not be less than Rs. 3000/- a month, it will be better that he should be placed in charge of 3 or 4 mills in the District—so that his pay and allowance will be charged to the expenses of those mills. The educated Bengalee should be taught in the technicalities of the business so that in course of few years' time they can take charge of the mills when each expert European Manager will be put in charge of 8 or 10 jute mills. In course of time it will not be an unusual sight to get a qualified Bengalee mill manager on Rs. 500 a month. The overhead charges in mills are the greatest stumbling block for development of a small-sized mill, whereas it is a common sight in Europe specially in Italy to have a successful jute mill of 50 to 100 looms, in India it is an impossibility ; when the Bengalee youngmen will be trained in jute mill managership, Bengal may run successfully small-sized jute mill of 100 to 300 looms.

As to the training of these youngmen—We can start one jute mill in Calcutta of 500 looms and take in good number of youngmen, who will

be trained in the industry under expert workers. By the time jute mills will be started in the Moffusil, these youngmen will have sufficient training to run the show under expert jute mill manager. In referring to Bengal youngmen we do not mean only Hindu youngmen—we mean youngmen of Bengal, Hindu, Musalman, Parsee, Christian or Anglo-Indian in fact all classes and communities who are living in Bengal. There should be no distinction of caste or creed.

Sanitary condition of new Jute Mills—The dust of jute mills often tells upon the health of workers. But new devices have been introduced in foreign mills specially in Dundee mills which take away all the dust through elevator and other appliances. If these are introduced in the new mills, the sanitary arrangement will be up-to-date. Besides bungalow of the workers—there should be all amenities of life such as dispensary, club, library, sporting ground, school and college and other amenities of life to which this middle class educated youngmen are accustomed. In the Moffusil there are enough sports for snipping, boat racing, picnics which will make the life of the youngmen happy and comfortable.

As to the present marketing of jute and jute manufactures—We give the following figure showing the countries to which jute and jute manufactures are exported in 1920-21.

Future marketing of jute manufacture.—

As soon as the mills under the Development Trust will make a headway and there will be less export of raw jute to feed the foreign mills—there will be hue and cry and these foreigners may retaliate by imposing duties on the jute manufacture from Calcutta, so as to enable them to use cotton or paper as a substitute for jute. A contingency like that can only be met by the combined effort of the present jute mills and future jute mills under Development Trust and it will require the intelligence of the expert in the line to deal with the situation. The following number of workers who are employed in foreign jute mills from the export figure of raw jute of the year 1920-21—We calculate 16 tons on the average consumption of one loom and 6 men as the workers on each loom.

	Tons.	Looms employed.	Workers employed.
England (U. K.)	136,624	8,532	51,192
United States of America ..	110,005	9,875	41,250
Germany ..	70,931	..	..
France ..	50,813	..	..
Belgium ..	25,670	..	..
Spain ..	23,857	..	..
Italy ..	22,869	..	..
Brazil ..	8,709	..	..
Other Countries	15,591	..	..

The above foreign workers numbering about 175,000 will be affected. But as looms have been increased in recent years in foreign countries and as the average export of raw jute is calculated at 35 crores a year we may safely take the figure as 250,000 workmen in different foreign jute mills.

Consider that a jute mill worker in an American mill never gets a salary less than 2 dollars a day *i.e.* equal to about Rs. 6 a day. The jute, they purchase, is at a higher rate than is purchased by Calcutta mills. It is all probable they will have some import duty on the manufactured products of Indian Mills to compete in prices with them.

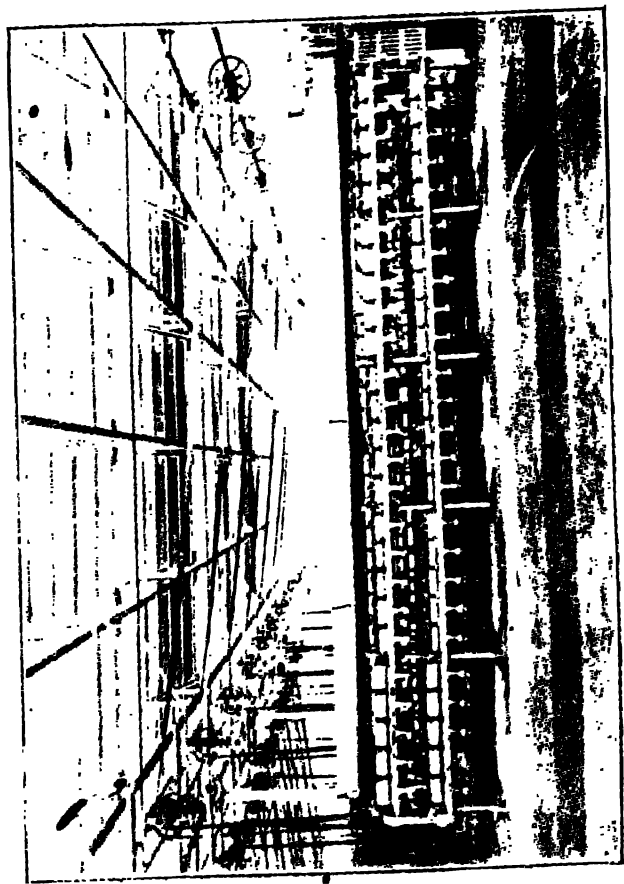
Multifarious uses of Jute manufactures.

In the present market of jute trade—Hessian and Sacking are used in wool packs, Cuban flour bags, Java sugar bags and other purposes to carry agricultural goods. But besides this commercial purposes, gunny is a war material in the sense, that it is greatly used in war for sand bags in trenches and for carrying war materials and so long the beastly spirit in man lies rampant, war is inevitable to-day or to-morrow—in spite of all the disarmament conferences; and if these jute mills are now started they will be able to share in the profits of the future war. Though we don't pray

for war but it will come ; and when that necessary evil will come why not take advantage of that. Besides the above, experiments are going in Germany as well as in Calcutta street to utilise jute manufacture in the Road-making. The experiments that are being made are successful. So it can be hoped that there will be great demand of jute manufacture for future Road-making of the world. There is further experiment is going on in using this jute manufacture in the walls of the cold country in place of paper. If a device can be made by which this jute manufacture along with some material be non-conductor of cold then there is a good field for extension of jute manufacture throughout cold countries of the world. Jute manufacture is in the course of evolution. So the condition of the foreign countries should be studied properly. For this purpose we suggest that like Tea Cess Committee all the jute mills should continue for propaganda and sale of jute manufactures in different countries. In this direction there is a vast untapped field for expansion. If needs be, the future jute mill will have their selling agents throughout all the parts of the world.

Jute Share Market.—As the jute mills of Bengal are running on almost scientific method,

IN A MODERN JUTE MILL



WARP WINDING FRAMES

the shares of jute mills are in good demand. Shares of the most of the prewar mills and some after-war mills are paying good dividend—(excepting the figure of the last two years). Some of the mill shares touch sometimes the premium of 40 to 70 rupees per Rs. 10 meaning 100 shares of Rs. 10 each are sold in the market on an average between Rs. 4000 to Rs. 7000. Now consider the way in which the share market speculate in the shares. When there is a good difference of purchasing price of jute and selling price of jute manufacture anticipating that the jute mill will be able to make profit on the day's working—the share value goes up in anticipation of the better dividend of the shares. Unless the mills are run on scientific way such anticipation would not have materialised. But with clock-like regularity the mills are run, the manager sparing no pains to turn out goods to the best advantage of the mills. These jute mill managers are one of the finest specimens of the business men. You may criticise the British Government but when you will come in contact with the British element in the managership of a jute mill, you will simply be filled with regard for the manager. With sleeves up and pipe in his mouth it is a

sight to see a manager of a jute mill at work. When new jute mills will be started the British character in jute mill manager should have to be copied to run successfully the future jute mills. Punctually at 4-30 the bugle calls up, at 5-30 all the men are at work and by 8-30 when the Bengalee Babus are finishing their last cup of tea—they have finished almost half days work and have produced tons of money in shape of gunny. The Marwaries are the principal share brokers. They have piled up crores and crores out of it. Besides other assets, the almost whole of Central Avenue's big buildings are made principally through speculation in jute shares.

The security of service for workers in jute mills under Development Trust Act—We have shown elsewhere that the whole of the profits, excepting a small amount, of jute mills started under Development Trust go to the pocket of the workers. Now so long the jute mills can be worked economically—there will be less chance of its failure. So from the experience of the jute mill activities for a period covering over 80 years it can be safely said that jute being the monopoly of Bengal—there will be more and more demands for the jute manufacture for various purposes.

With the growth of the world trade along with the growth of population, it can be naturally expected that more area would be cultivated for jute requiring more looms to convert them to manufactured goods. In 1900 there were 7,000 looms and in 1925 there were over 50,000 looms nearly 700 times. So if there are now 50,000 existing looms and another 50,000 for the new jute mills *i.e.* 1 lac looms in course of 10 years' time we will be requiring at least double more in another 25 years' time *i.e.* another 100,000 looms. If a proper propaganda is undertaken and if the foreign market condition is properly tackled we will not be surprised to see that the world is consuming more and more of this manufactures. The proposed increment of 50,000 looms under Development Trust is no increment in the broad sense—as there already exist good number of mills in the foreign countries to convert the raw jute into jute manufacture. So any development in the industries will mean development after 1 lac looms. As more looms will be required they can be started under Development Trust, and another 6 lac workers can be employed in course of 25 years time. The workers can hope that their service will be as secured as in Railway or other Semi-Government institutions.

Provident Fund for Workers—We have shewn that besides Rs. 500 as an average income of jute mill workers—they will also be entitled to another sum of Rs. 300 more or less as the profit goes at the end of the year. If a Provident Fund be started deducting one anna per rupee of the income of the workers, the Company paying one anna and if it is compounded at 5 per cent it will give a decent sum at the end of 20 or 25 years' service. Supposing the average income of a worker is Rs. 100 a month for 20 years, he will get at the end of 20 years Rs. 4950, at the end of 25 years service Rs. 7050/- which along with his insurance money, say Rs. 2000 to Rs. 2500 with bonus will give him Rs. 10,000 on retirement; a sum of Rs. 10,000 quite a decent sum for his old age.

Secondly—The average income of the workers will be increased by at least 10 per cent after the 15th year, as there will be no necessity of making payment of 4 per cent interest and another 5 per cent for Capital Sinking Fund, because the capital will be paid back within 15 years or so.

Income tax charge of Government for mills started under Development Trust—The

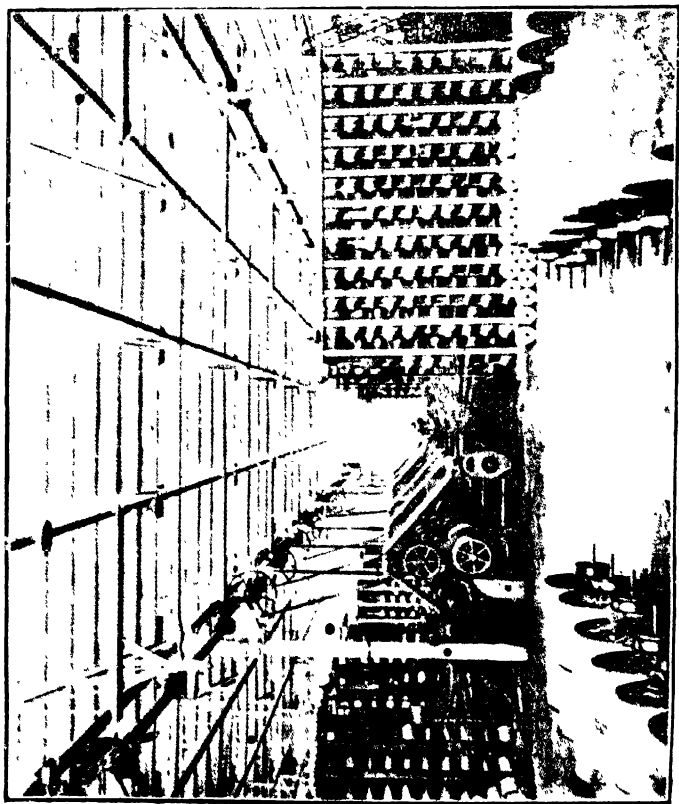
Government should not charge income-tax on the profits of the mills save and except professional income-tax of the individual workers, as the Government is already been benefited by export duties. Co-operative institutions are exempted from the operation of income-tax,—why not do the same for Development Trust institution.

Government Guarantee and White Paper Proposals—The above of jute duties amounting to about 4 crores are taken at present by the Central Government. But a proposal has been made in the White Paper to pay 50 per cent to the Provincial Government of Bengal. It is only on the guarantee of Central Government that the big sum of Rs. 40 crores can be raised in 10 years' time. So it is proper that on the basis of the figure of 1930, if half of the jute export duties are given to the Provincial Government, any increase of jute duty over and above the year 1930 as well as increased income-tax should be appropriated by the Central Government as the increase—means the increase of consumption of raw jute by the jute mills under Development Trust which in all equity should go to the coffer of the Central Government who has guaranteed the interest of the capital for jute mills.

BENGAL YOUTHS AND THE JUTE MILLS.

When the Medical College at Calcutta was first opened with dissection class, it was the Bengalee youngmen who joined the college though it was against their religious susceptibilities ; now the best medical men can be found amongst the Bengalees. When the English Barristers were pling up money, your forefathers did not lag behind and now the best Counsels of the Calcutta High Court are the Bengalees. Don't forget the memorable words of Late Mr. Gokhale—"What Bengal thinks to-day, India thinks to-morrow." Show the other people of India, that when call for your manhood and manual labour came, it was the Bengal youth to respond to that call first ; and in the next decade, the best business magnate will be Bengalee. Remember that the jute industry alone can solve all your unemployment and make good the loss due to the unpardonable folly of Bengal in neglecting its jute industry. You have been left the legacy of poverty and unemployment by your predecessors. Don't you leave the same to your sons and children ? In conclusion we don't quote a better stanza than the memorable songs of the world's greatest poet, Dr. Rabindra Nath Tagore composed on the eve of the first World

IN A MODERN JUTE MILL.



BEAMING MACHINES

Conference after the War—দিন আগত ঐ, ভারত তবু
কই.....as if Mother World weeping—the day of
Conference is drawing near, where is India ?

If you have eyes to see, if you have ears to hear—hearken the voice of Mother Bengal weeping in the same strain—for you, starving young hopes of Bengal—“ Where are you, my beloved sons of Bengal—where all the people of the world—the Scotchmen, the Englishmen, the Marwaries, the Parsis, the Guzratees are sharing in the profits of my jute—Where are you, my beloved sons of Bengal !”

In concluding this chapter, we call upon the youngmen of Bengal to do justice to the jute industry. They will find in it a sphere of activity which will raise not only the economic condition of about 3 lacs Bengalee middle class young men and along with them at the rate of 5 member head of the earning member another 15 Lacs of their dependants and possibly another 6 lac workers in course of 25 years' time but that of the jute growers too, the combined effects will be the general economic uplift of the whole of Bengal. The author does not suggest anything extra ordinary but a most common sense view of the situation. The growth of this Industrial Colony will give you Economic Swaraj. It

is a big war fare no doubt, where patient working, obedience to Central Authority, regular attendance in work will lead to success. Our earnest appeal to you is—Don't be carried away by sentiments of this or that movement but take the facts as they are. If fields of work be opened to you, don't shrink it—as your forefathers did not, when the Medical College was started with dissection classes.

**SHOWING THE EXPORTS AND INDIAN
CONSUMPTION OF CLOTH (LAST THREE FIGURES)
FROM EACH ITEM OF QUANTITIES OMITTED.**

CLOTH IN YARDS.

Year.	Export.	Year.	Indian Consumption.
1920-21	1,352,739	..	..
1919-20	1,275,125	1920	..
1918-19	1,103,211	1919	34,415
1917-18	1,196,826	1918	52,949
1916-17	1,230,950	1917	37,275
1915-16	1,192,256	1916	37,789
1914-15	1,057,324	1915	30,555
1913-14	1,051,151	1914	26,567
1912-13	1,021,816	1913	19,638
1911-12	871,484	1912	14,714
1910-11	955,300	1911	24,273
1909-10	940,101	1910	30,716
1908-09	769,798	1908	15,597
1907-08	789,855	1909	15,488
1906-07	696,057	1907	16,229
1905-06	658,671	1906	16,477
1904-05	575,511	1905	13,958
1903-04	552,320	..	..
1902-03	492,883	..	..
1901-02	418,569	..	..
1900-01	365,214	..	..

Exports gunny cloth including gunny bags—2 yards of cloth being equal to 1 bag—from the year 1918-19 to 1920-21, from Calcutta by all routes within India, are shown below :—

	1920-21.	1919-20.	1918-19.
Quantity Yards	230,023,952	248,167,202	286,550,568

**SHOWING THE EXPORTS AND INDIAN
CONSUMPTION OF GUNNY BAGS (LAST THREE
FIGURES) FROM EACH ITEM OF QUANTITIES
OMITTED.**

NUMBER OF BAGS.

Year.	Export.	Year.	Indian Consumption.
1920-21	533,908	..	..
1919-20	342,729	1920	..
1918-19	583,096	1919	97,426
1917-18	758,390	1918	112,178
1916-17	805,094	1917	104,511
1915-16	794,152	1916	98,244
1914-15	397,565	1915	79,711
1913-14	368,759	1914	67,106
1912-13	311,707	1913	68,732
1911-12	289,894	1912	99,491
1910-11	360,880	1911	90,390
1909-10	364,368	1910	78,945
1908-09	300,906	1909	56,791
1907-08	293,029	1908	43,657
1906-07	257,683	1907	58,921
1905-06	233,326	1906	51,666
1904-05	201,436	1905	68,702
1903-04	206,207	..	..
1902-03	225,196	..	..
1901-02	230,126	..	..
1900-01	202,908	..	..

**SHOWING THE CONSUMPTION OF RAW JUTE AS
GIVEN IN THE ANNUAL REPORTS OF THE
INDIAN JUTE MILLS ASSOCIATION.**

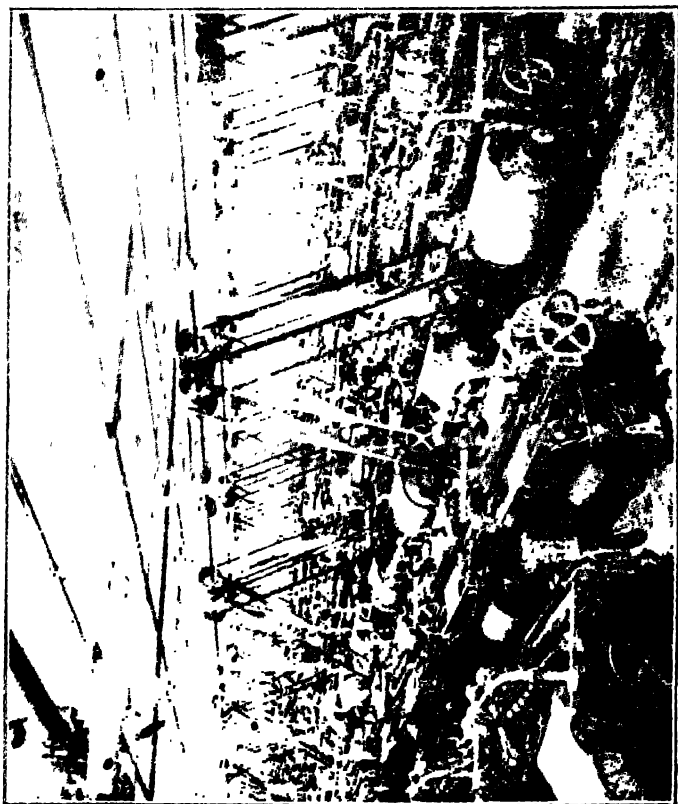
Season July to *June.	Quantities bought by the mills.	Actual Indian mill consump- tion.	Exports.	Total Consumption (including 5 lakhs of bales estimated as the Indian domestic consumption.)
	Lakhs of bales.†	Lakhs of bales.†	Lakhs of bales.†	Lakhs of bales.†
1919-20‡	60	..	34.00	99.00
1918-19‡	60	50.00	22.00	87.00
1917-18	61.42	52.96	17.26	83.68
1916-17	53.5	55.2	28.10	86.6
1915-16	53.28	56.09	31.06	89.34
1914-15	60.10	48.05	29.67	94.77
1913-14	43.95	43.74	41.92	90.87
1912-13	47.41	44.35	49.42	101.33
1911-12	41.62	37.51	46.26	92.88
1910-11	36.72	39.80	35.31	77.03
1909-10	42.69	44.59	40.09	87.77
1908-09	36.49	35.93	46.31	87.80
1907-08	39.05	36.58	42.76	86.81
1906-07	38.37	34.31	45.06	88.43
1905-06	34.27	29.57	41.36	80.63
1904-05	28.86	30.77	35.25	69.11
1903-04	..	28.92	37.65	71.57
1902-03	..	27.45	32.53	54.98
1901-02	..	25.51	43.14	73.65
1900-01	..	24.15	35.42	64.57

* From 1892-93 to 1906-07, jute season extended from August to July.

† 1 lakh : 100,000.

‡ Estimated figure.

IN A MODERN JUTE MILL



WEAVING

**SHOWING THE VALUE OF JUTE AND
JUTE MANUFACTURES EXPORTED FROM INDIA.**

Year.	Value of Jute.	Value of Manufactures.
	Rs.	Rs.
1920-21	16,36,08,642	52,99,46,798
1919-20	24,69,94,523	50,01,54,627
1918-19	12,72,00,782	52,65,22,838
1917-18	6,45,38,400	42,84,31,005
1916-17	16,28,81,038	41,67,23,712
1915-16	15,64,20,356	37,97,85,050
1914-15	12,91,02,030	25,82,03,189
1913-14	30,82,63,940	28,27,37,292
1912-13	27,05,06,730	22,87,21,755
1911-12	22,55,66,010	16,00,82,760
1910-11	15,48,99,736	16,99,48,792
1909-10	15,08,83,097	17,09,66,496
1908-09	19,83,45,551	15,73,59,991
1907-08	17,97,28,013	18,29,76,445
1906-07	26,83,86,810	15,71,62,303
1905-06	17,12,56,641	12,44,79,844
1904-05	11,96,56,462	9,93,88,676
1903-04	11,71,81,222	9,46,91,969
1902-03	11,12,64,752	9,01,98,987
1901-02	11,79,72,723	8,71,14,174
1900-01	10,86,77,562	7,86,46,012

SHOWING EXPORTS OF JUTE AND MANUFACTURES TO FOREIGN COUNTRIES DURING 1920-21.

Countries.	Jute. (Tons)	Gunny Bags. (Number)	Cloth (Yards).
United Kingdom ...	136,624	48,013,316	94,583,232
France ...	50,813	13,810,600	18,980,299
Belgium ...	25,670	15,584,780	...
Germany ...	70,931	...	...
Rumania ...	...	2,846,000	...
Spain ...	23,857	...	...
Italy ...	22,869	750,000	...
Greece ...	...	4,016,100	...
Turkey ...	...	3,323,050	...
Straits Settlements ...	...	7,330,560	...
Java ...	...	24,612,539	...
Siam ...	...	14,606,100	...
Indo-China ...	...	17,373,500	...
China ...	...	32,366,000	6,137,000
Japan ...	7,34	13,858,000	...
Philippines ...	...	...	1,848,000
Egypt ...	...	13,112,700	1,236,000
Cape Colony ...	...	2,908,800	...
Natal ...	...	10,814,750	...
Transval ...	...	3,396,750	...
Other African Ports ...	...	9,230,500	...
Mauritius ...	...	4,110,500	...
Brazil ...	8,709	...	...
United States ...	110,005	71,811,760	932,956,469
Canada ...	...	...	41,415,400
West Indies ...	...	31,916,300	...
Chili ...	...	54,310,100	...
Peru ...	...	5,063,300	...
Argentina ...	...	4,550,100	208,585,000
Uruguay ...	...	...	3,779,200
Australia ...	...	91,391,800	17,273,980
New Zealand ...	...	9,721,300	...
Sandwich Islands ...	...	3,831,520	8,082,000
Other Countries ...	15,591	29,247,453	14,862,069
TOTAL ...	472,414	533,908,109	1,352,738,649
Tons ...	472,414	467,580	357,424

**SHOWING EXPORTS OF JUTE (REJECTIONS AND
CUTTINGS EXCEPTED) TO ALL FOREIGN
MARKETS.**

Foreign Markets.	1905-06	1910-11	1915-16
	Bales	Bales	Bales
London ..	454,940	418,154	419,412
Liverpool ..	25,083	14,739	13,999
Dundee ..	1,177,293	769,181	1,126,734
United Kingdom (other Ports) ..	2,749	..	984
Hamburg ..	709,938	739,451	..
Bremen ..	86,759	104,257	..
Fiume ..	75,129	82,228	..
Barcelona ..	48,841	20,185	85,039
Boulogne ..	156,367	39,374	59,077
Dunkirk ..	208,128	280,659	26,427
Treport ..	49,823	6,229	12,900
Leghorn ..	..	18,649	78,461
Genoa ..	84,022	45,169	229,799
Ancona ..	18,496	31,566	..
Venice ..	66,832	80,814	..
Marseilles ..	15,433	18,569	24,022
Trieste ..	168,361	142,352	..
Port Said ..	..	23,503	..
Continent (other ports)	82,764	165,242	162,767
New York ..	161,480	129,436	167,278
San Francisco ..	18,410	16,846	18,978
Philadelphia ..	42,265	33,630	28,625
Boston ..	19,187	83,032	159,447
Portland etc. ..	85,411	28,481	64,569
Hongkong and Japan	11,676	12,347	22,600
Australia ..	805	1,093	2,148
Other Ports ..	28	4	34,740

CHAPTER VII.

SHIPPING INDUSTRY IN INDIA.

“Thus passed away one of the great national Industries of India after a long and brilliant history, covering, as we have seen, a period of more than 20 centuries. It was undoubtedly one of the triumphs of Indian civilisation, the chief means by which that civilisation asserted itself and influenced other alien civilisations. India now is without this most important organ of national life. There can hardly be conceived a more serious obstacle in the path of her Industrial development than this almost complete extinction of her shipping and ship-building”—with these words Prof. Radha Kumud Mukherjee concludes the history of the fall and decline of Indian shipping in his memorable work, “History of Indian Shipping and Maritime Activity.”

Early History of Indian shipping and its maritime activity.

That India had a developed mercantile marine before the seventh century B. C. and used to have trade relations far and near is even admitted by

the foreign writers. Government Imperial Gazetteer of India says,—“About the commencement of seventh century B. C. traffic by sea sprang up between the Persian Gulf and India and even China. It has generally been held that the traffic by sea was much older.”

India had a developed civilisation some 5000 years ago, as Professor Maxmuller says and according to others, Indian civilisation is still older one. From the various writers on the subject we guess the age of Indian shipping and its maritime activity as between 20 to 30 centuries right upto the middle of the last century. Indian shipping was used for two distinct purposes—one for trade purpose, just as the present day mercantile marine is used and another for colonisation purpose. Java, Ceylon, Malayanasia and Indonesia were conquered and colonised. It was the proud day for India when it was not only an advanced civilized nation and its Buddhist religious preachers made a moral conquest of China, Japan, Ceylon and Indo-Asia, but its sea-going vessels visited the foreign countries for trade and commerce as well as for conquest and colonisation. Consider those early days when the present European nations were

Prehistoric
India—a first
class power with
high civilisation.

uncultured races, the Indians were proud of an advanced type of civilisation. Its high philosophy, still unsurpassed by any nation of the world, not even by Kant and Hegel ; its literature, its arts, its industries and its commerce and trade—its colonies and conquests, both physical and moral, through its religious teachers, were the wonders of the then world. Indian religion and culture were then a bye word. The cultural conquest of Ceylon, China, Japan, Java, Burma, Malayan Peninsular Islands, Central Asia, i.e. over three-fourth of Asia and colonisation of Java, Ceylon and other parts ; trade and commerce principally through inland routes with Asian and European countries were the distinctive features of that great civilisation and that civilisation was nursed and carried principally through sea route by the Indian sailing vessels. This is the history of the Indian shipping Industry till the middle of the last century. Since then the Table has turned. When the character of those Indians are depicted as that of semi-barbarians by interested persons belonging to the newly born nations, the saner minds in India take no notice of that picture as it betrays a colossal ignorance of the ugly artists whose picture is nothing but a reflection of the darker spots of their own country.

THE CYCLONE OF 1864



"EARL OF CLARC" ASHORE ON SITE OF PRESENT NORTH MILL
ASSISTANTS' BUNGALOW, BARANAGORE

After the introduction of steam power in England the first iron and steel ship was built in the year 1858. It was the "Great Eastern," a mixed cargo and passenger vessel, the first iron ship of 18,914 tons gross, with a length of 680 feet, exceeded only in 1901 by "Celtic" with 20,904 tons gross and 680 feet in length. Her ample proportions sufficed to carry enough coal for round voyage between England and Australia. She was, besides, the first ship fitted with steam steering gear. The history of hand-made gunny and cotton goods was repeated in the shipping industry. The Indians did not make any attempt to build steel ship with steam power. This want of adaptability to the modern appliances killed one of the best Industries of India.

The fact is that if India aspires after any increase of its export trade or to put it more properly, if India instead of being producer of raw materials wants to convert its raw products to finished goods and thereby capture the foreign markets for disposal of its surplus products, India must have a mercantile marine of its own. It is not only the coastal trade but the international

Without National Mercantile Marine, Export trade on a bigger scale is impossible in India.

trade demands with all the force for a requisite number of mercantile marine. It is the transport facilities above all that is enjoyed by Japan and other foreign countries that make the goods of their origin cheaper not only in the Indian market but also in other foreign markets, where Indian goods cannot stand in competition. Any dream of complete industrialisation of India without its own shipping trade is an idle dream.

Fabulous Income of the Shipping Trade.

We have got no data to ascertain the income of the early Shipping Trade beyond the surmise that the growth of any Industry pre-suppose the fact that the Industry is a paying one. It may be, that growth and extension of Railway lines in India does not always conform to the above theory but there are political reasons for which some Railways are run by the Government, irrespective of the fact whether they are paying or not. But it is a fact that the present shipping companies are making fabulous income. Let us show the income under two categories, (1) the income of the coastal shipping companies, both in freight of goods, imported from one port to another and the passenger fare earned by the coastal shipping companies ; and (2) the freight that India pays

for its import and export in international trade and by way of passenger fare for international ports.

(1) Coastal Shipping Income.

As India is blessed with sea board of more than 4000 miles and possesses good ports such as Rangoon, Calcutta, Madras, Bombay, Karachi, Colombo, (Singapore), Cannanore, Telichary, Waltair, Cochin, Alleppey and some other small ports interchange of goods passes between these ports. Thus Rangoon supplies its rice, timber, and oil to Calcutta, Bombay and other ports. Bombay supplies its cotton piece-goods to Calcutta. So a very heavy traffic passes between these ports. The rates of freight varies according to the distance between the ports and according to the class of articles. Thus the usual freight per ton of rice from Rangoon to Calcutta is Rs. 14/- whereas the freight on rice between Rangoon to Bombay is Rs. 16. We quote the following from Mr. Hazi's "Economics of Shipping":—

"Thus the average of freight rates from Cannanore, Telichary and Calicut to Bombay, Karachi, Colombo, Calcutta and Rangoon is Rs. 29/- (per ton); the average freight rate from Bombay to all Indian ports on about 60 articles is Rs. 20/-

(per ton) ; the average from Mangalore to Bombay, Karachi, Colombo, Calcutta, Rangoon and Madras on about 50 articles is Rs. 19/- ; the average from Karachi is Rs. 20/- ; the average of freight from Cochin and Alleppey to Bombay, Karachi and various other Indian ports is Rs. 25/- ; the average rate from Calcutta and Rangoon for general cargo is Rs. 21/- and Rs. 23/- respectively. All these figures of rates are taken from quotations per ton or 40 c. ft. to a ton. Commodities quoted by any other unit would, however, bear about the same rate by space or weight."

Taking an average of these, we get 22.42 as the average rate of freight along the Indian coast, i.e. the standard Indian freight rate may be regarded as Rs. 22/- per ton.

Turning now to the amount of cargo lifted, we find that very exact estimates give us about 55 lac of tons as exported from Indian coast ports for imports into Indian ports.

So the annual income out of the freight on the cargo carried between the Indian coastal ports amounts to Rs. 12,10,00,000 (55 lac tons at Rs. 22/- per ton) i.e. over Rs. 12 crores annually.

Now let us see the income of the passenger fare in the Indian coastal ports. The following

is the statement of the passenger traffic of Rangoon port for 15 years ending 1919.

Rangoon Passengers.

	Arrivals.	Departures.	Total.
1905	326,832	274,643	601,475
1906	291,751	260,280	552,031
1907	239,701	226,966	466,667
1908	252,075	227,568	479,643
1909	256,482	192,801	449,283
1910	268,107	217,111	485,218
1911	289,445	221,981	511,426
1912	256,985	240,917	497,902
1913	313,039	271,687	584,726
1914	216,841	73,242	290,083
1915	291,968	198,715	490,683
1916	229,865	200,898	430,763
1917	206,789	216,910	423,699
1918	238,138	206,280	444,418
1919	271,453	200,646	472,099

Of these a very vast majority are Indian deck passengers. They play a large part in the economic life of Burma and their importance may be gauged from the following recorded opinion of the Rangoon Chamber of Commerce.

“Burma has to very largely depend upon India, for the all important labour supply with which to move her harvest, to man her Industries, to deal with her shipping, to provide Railway servants and domestic servants and to supply coolies for general purposes. As matters stand,

the supply does not equal the demand with the result that wages in Burma are far above the Indian level".

Mr. Haji in his "Economics of Shipping" says "Passenger trade is, however, an important adjunct of the shipping business and the fares derived from that source should be considered, if the present enquiry is to be as exhaustive as possible. Here, too, the business is divisible into two main classes, coastal and oceanic. As regards the former, exact figures are available only for the number of deck passengers travelling along the coast. Careful calculations made by multiplying the number of passengers officially stated to have travelled in 1919-1920 between various Indian ports by the fares then charged for those passages give the following results :—

Passages.	Deck Passage Money.
Bay of Bengal ..	.. Rs. 45,75,000
Bombay Presidency ..	.. ,, 51,82,000
	<u>Rs. 97,58,000</u>

To this figure, we may add Rs. 12,42,000 to round up the total as also to account for the fares paid by the cabin passengers. The coastal passenger traffic earns, therefore Rs. 1,10,00,000. per annum. •

We have shewn that the total income out of freight on cargoes between the Indian coastal ports is Rs. 12,10,00,000. So the total income by passenger fare and freight on cargoes on the Indian coastal trade comes to—

Passenger fare	Rs.	1,10,00,000	
Freight on goods	„	12,10,00,000	
		<hr/>	
	Rs.	13,20,00,000	i.e. over
Rs. 13 crores yearly.			

The Capital Outlay on Indian Coastal Ships.

When there was a talk of reserving coastal trade to the vessels owned by the Indians only, the following estimate of capital outlay on ships was given by the Scindia Steam Navigation Co. Ltd. to the Indian Mercantile Marine Committee.

A statement of the estimated total cost of Indian owned new vessels necessary to reserve the passenger and cargo trade along the coast of India to vessels of the Indian Mercantile Marine.

12 Passenger steamers for traffic in the Bay of Bengal at an average price of Rs. 15 lacs each ..	1,80,00,000
3 Passenger steamers between Karachi and Bombay at Rs. 15 lacs each ..	45,00,000
20 Passenger steamers, in addition to Ferry Boats, for the Karachi, Bombay, Konkon coast run (various size) ..	1,00,00,000
River Passenger services ..	1,00,00,000
100 cargo steamers of an average size of 7,500 tons D. W. at Rs. 11,25,000 each ..	11,25,00,000
Barges, Launches, tenders, tugs, fackles in various small ports ..	1,00,00,000
Total Rs. ..	16,50,00,000

“ To handle on an average of 50 lacs of tons of cargo in the coastal trade, ships of 6 lacs dead weight tonnage will be required.” Taking an average steamer to be of 6000 tons, this means the employment of 100 steamers, which would prove, and which does prove quite adequate for the present needs of the country ”—says Mr. Haji. Further the capital outlay of Rs. 16,50,00,000 can be reduced greatly if cargo steamers of not more than 5 years old are purchased to meet the coastal trade of India. The above estimate was given

some years back but if the present price of cargo steamers and passenger steamers is taken, the new ships will not cost more than Rs. 12 crores, and if some of the ships which are not 5 years old are purchased, then the whole capital outlay on the ships will not be more than 9 to 10 crores of rupees fetching annually an income of more than Rs. 13 crores.

Shipping Capital.

We quote the following from Mr. Haji's "Economics of Shipping" to show the fluctuation in the prices of ships at different times ranging a period of 25 years.

"Capital expenditure in shipping primarily depends upon the type and size of the vessels selected, the nature of the trade served and the time when the purchase is made. Taking the last first, a study of the shipping values for the last quarter of a century will show that wide fluctuations are rather the rule than the exception in the tonnage market. The history of these fluctuations during the last twenty-five years teaches many lessons which a buyer of new tonnage will be ill advised to neglect."

**SEA-GOING STEEL AND IRON STEAMERS AND
MOTOR VESSELS OF 100 GROSS TONS
AND OVER, OWNED BY THE PRINCIPAL
MARITIME COUNTRIES.**

Country.	June 1914 Tons gross.	June 1923 Tons gross.	Difference between 1923 & 1914 Tons gross.
(1) Great Britain & Ireland ..	18,877,000	19,077,000	200,000
British Dominions ..	1,407,000	2,219,000	812,000
(2) America (United States) ..	1,837,000	12,416,000	10,579,000
(3) Japan ..	1,642,000	3,402,000	1,760,000
(4) France ..	1,918,000	3,265,000	1,347,000
(5) Italy ..	1,428,000	2,788,000	1,360,000
(6) Holland ..	1,471,000	2,606,000	1,135,000
(7) Germany ..	5,098,000	2,496,000	2,602,000
(8) Norway ..	1,923,000	2,299,000	376,000
(9) Spain ..	883,000	1,169,000	286,000
(10) Sweden ..	992,000	1,092,000	100,000
(11) Denmark ..	768,000	920,000	152,000
(12) Greece ..	820,000	743,000	77,000
(13) Belgium ..	341,000	600,000	259,000
(14) Austria-Hungary ..	1,052,000		
(15) Other countries ..	2,057,000	2,847,000	790,000
	<hr/> 42,514,000	<hr/> 57,939,000	<hr/> 15,425,000

It will be seen that amongst the principal countries apart from Germany, Greece is the only one which still shows a reduction in the tonnage now owned as compared with 1914.

The sea-going tonnage of the United States has increased by over 10½ million tons. The other countries in which the largest increases are

recorded are :—Japan,—1,760,000 tons ; Italy,—1,360,000 tons ; France,—1,347,000 tons ; and Holland,—1,135,000 tons. Taken together the Scandinavian countries Norway, Sweden and Denmark show an increase as compared with 1914 of 628,000 tons.

In 1914 the United Kingdom owned nearly $44\frac{1}{2}$ per cent of the world's sea-going steel and iron steam tonnage ; its present tonnage is just under 33 p. c. The United States occupy, now, the second place with 12,416,000 tons—equal to 21·4 per cent. The other leading countries are :—Japan,—3,402,000 tons ; France,—3,265,000 tons ; Italy,—2,788,000 tons and Holland, 2,606,000 tons.

Notwithstanding recent increases in the tonnage owned by Germany, the above table shows the change which has taken place in the maritime position of that country, where the tonnage now owned is some 2,602,000 tons less than in 1914.

Obviously the above figures do not take into consideration the question of the efficiency of the various Merchant Navies, as in addition to such factors as size, age, type and speed of the vessels, other circumstances, which do not lend themselves to a statistical analysis, would have to be taken into account.

Reverting however, to the topic of shipping capital, the conclusion derived from a study of the Indian coastal and the world's ocean tonnage, both cargo and passengers, is further supported by a scrutiny of the cargo tonnage alone and of all sizes. For this purpose let us take the cargo steamers of Great Britain which owns a large proportion of the requisite tonnage. An analysis of the British Cargo-Steamer Companies in the year 1922 also indicates the moderate character of the capital required in the shipping industry.

No. of Companies.		Paid up capital	
19 ..	.. £	100,000 and under	
34 ..	..	100,000- 500,000	
5 ..	..	500,000- 1,000,000	
6 ..	..	1,000,000- 5,000,000	

It follows therefore that the number of steamers belonging to the different companies should also be limited. Out of the 64 companies mentioned above, only ten companies own more than ten steamers each ; of these only three have more than twenty steamers, the first having fifty-seven steamers, the second and the third twenty to thirty four steamers.

Of the companies owning less than ten ships, nine own steamers varying from nine to five each ;

twenty seven companies have only two, three or four steamers each and as many as eighteen companies have each one steamer only.

•The one-ship company is an important feature.

Profits of the
one Ship
Company. • of the shipping industry and new
formations of that nature are usually
the rule. Any one with a knowledge
of the business and in a position to raise about
£50,000 can become, if luck favours him, a success-
ful ship-owner theoretically competing on equal
terms with the richest shipping magnate in the land.

Small Capita
outlay for Ship-
ping Companies
in contrast to
big outlay on
Railways. The smallness of the capital outlay in the
shipping trade in contrast with the
big capital outlay can be found from
the estimate of expenses in the ship-
ping by all the countries by Mr. G. A.
Sacter, Chairman of the Allied Maritime Transport
Executive during the war which put the total cost
on the ocean going shipping of all the countries at
Rs. 450 crores (£300,000,000 taking Rs. 15/- to £).

• If we contrast the above capital outlay on
shipping by all the nations, we will find that the
capital outlay on the Indian Railways covering
42,700 miles of Rail Road is about Rs. 800 crores ;
whereas the same on the English Railways alone

amounts to £1,000,000,000 or Rs. 1,500 crores (Rs. 15/- to £) for 22,000 miles of English Railways.

(2) Shipping Income on India's Export and Import Trade (Excepting Coastal Ports).

Ocean routes are free to all nations.

“ The oceans provide the great highways of international trade which from port entrance to port entrance are free and open to all who observe the international rules of the road at sea. Although ocean traffic follows certain rather definite routes, no nation and of course no Company, can convert any route into an exclusive right of way, such as Rail Road Corporation possesses. A few short sections of some frequented routes of ocean traffic—the Panama, the Suez, Corinth and Kiel canals—are artificial, and subject to tolls, but their use is normally open to all upon equal terms. This simple but fundamental fact that the sea is an open highway, causes ocean transportation to be governed by laws different from those controlling the railway service; and the main problem of transportation economics, competition, rates and fares and Government regulations are radically affected by, this difference between this railway

and the ocean highway"—say Johnson and Huebner in their book "Principles of Ocean Transportation."

Now ocean routes being free to all nations and to all Shipping Companies and Immediate Return on investment on Shipping trade. the initial capital outlay on the Rail Road being not required in shipping trade—the capital expenditure in shipping is the purchase of the ships. It can meet all the expenses by freight and fare while leaving a port. Whereas it takes years to take sanction, to acquire land to build and to run a new Railway or to build a new factory—Shipping Industry can be started within a month or so and the earning of the shipping trade begins as soon as it begins to load cargo in any port. So we occasionally find that ships are chartered for carrying cargo or passengers for a short or long period and the chartered party sometimes make good profit out of the transaction.

As to the income of import and Export of India.—The income of the shipping companies varies according to rate of freight on the cargos they carry. This rate of freight is subject to variation as will be found from the following table.

**Calcutta to United Kingdom Continent Jute rate
per Calcutta Scale.**

Years.	Highest.	Lowest.	Years.	Highest.	Lowest.
1871	100 0	90 0	1895	30 0	18 6
1872	92 6	60 0	1896	22 6	12 6
1873	95 0	80 0	1897	32 6	15 0
1874	..	..	1898	37 6	22 6
1875	..	..	1899	31 3	25 0
Wheat etc.			1900	33 3	21 3
1876	80 0	75 0	1901	25 0	19 6
1877	75 0	45 0	1902	23 9	16 3
1878	60 0	32 6	1903	21 3	17 6
1879	80 0	40 0	1904	30 0	20 6
1880	85 0	60 0	1905	25 0	17 0
1881	75 0	60 0	1906	26 3	17 6
1882	65 0	40 0	1907	20 0	18 9
1883	60 0	45 0	1908	20 0	12 6
1884	42 6	27 6	1909	24 9	20 0
1885	37 6	32 6	1910	24 0	13 6
1886	33 9	27 6	1911	32 6	21 3
1887	35 0	27 6	1912	36 3	27 6
1888	60 0	30 0	1913	33 0	20 6
1889	45 0	30 0	1914	35 0	17 6
1890	36 3	22 6	1915	150 0	34 3
1891	40 0	32 6	1916	210 0	137 6
1892	33 9	12 6	1917	915 0	300 0
1893	30 6	20 0	1918	1,000 0	300 0
1894	32 6	22 6	1919	185 0	177 0

Class.	Cape Town. S. d.	Algoa Bay. S. d.	East London. S. d.	Natal S. d.	Delagoa Bay. S. d.
I	42 6	42 6	48 9	50 0	52 6
II	30 0	30 0	37 6	37 6	40 0
III	25 0	25 0	30 0	30 0	32 6
IV	22 6	22 6	27 6	27 6	30 0
V	20 0	20 0	25 0	25 0	27 6

Calculation of Freight paid in Export and Import Trade of India.

We find the average import of the 5 years 1925 to 1929 is Rs. 239 crores.

Whereas the average export } Rs. 326 crores.
of those five years }

The shipping freight experts usually take 8 p.c. of the value of the commodities as the freight of the cargo. The following analysis will show the correctness of the 8 p. c. method calculation from the proportion of the total freight to the value of some of the commodities imported into India and tabled below—

	Freight	p. c.
Chemicals .. ..	.. 6	.. "
Dyes and colours .. ..	.. 1.5	.. "
Iron and Steel .. ..	.. 6	.. "
Provisions and Oilman's Stores	.. 6.5	.. "
Spices .. ..	.. 4	.. "
Sugar .. ..	.. 6	.. "
Tea .. ..	.. 1.5	.. "
Coal, Coke and Patent Fuel	.. 26	.. "
Hides and Skins raw .. ..	.. 3	.. "
Oils .. ..	.. 40	.. "
Textile materials .. ..	.. 2	.. "
Chemicals, Drugs and Medicines	.. 6	.. "
Dyes and colours .. ..	.. 1.5	.. "
Metals (iron and steel) and manufactures thereof	.. 6	.. "
Yarns and Textile Fabrics .. ..	.. .83	.. "
Total for 12 items	.. 103.33	.. "
Average for 1 item	.. 8.6	.. "

Now as the values of the exports are F. O. B. and of the imports C. I. F. it will be necessary to deduct 10 p. c. from the latter to cover commission, freight, insurance, so that getting the F. O. B. value of imports as well, we can safely apply 8. p. c. method of calculation of freight.

Average import Rs. 239 crores.

Less 10 p. c. about „ 23 „

Rs. 216 crores.

Average value of import F. O. B. Rs. 216 crores.

„ „ „ export F. O. B. „ 326 crores.

Rs. 542 crores.

At 8 p. c. yields a total freight of rupees 43 crores and 36 lacs that is earned on the Indian export and import trade exclusive of the freight on coastal trade.

Besides the freight the passenger fare on non-coastal oceanic tours for in-coming and out-going passenger can be calculated as follows:—

In-coming 20 weeks business—

at 300 passenger per week—

at Rs. 1,000 as passage money Rs. 60,00,000

Out-going season $20 \times 300 \times 1000$ 60,00,000

Off season $12 \times 100 \times 1000$.. 12,00,000

Rs. .. 1,32,00,000

Grand Total income of shipping Trade in India.

So we come to the grand total—

Total Income of the Indian Shipping Trade	Coastal freight	Rs. 12,10,00,000
	Coastal passenger Fare	1,10,00,000
	Export and import freight	43,36,00,000
	Oceanic passenger fare	1,32,00,000
		<hr/>
		Rs. 57,88,00,000
		<hr/>

Over Rs. 57 crores is the income of the shipping companies on the Indian trade and to carry the whole trade 64,00,000 d.w. tonnage is required. If the average tonnage be of the size of 8000 d.w. tonnage India would require 800 steamers to carry the whole load of export, import trade inclusive of the coastal trade and passengers to and from coastal ports as well as oceanic and continental ports.

Future Increased Income of Shipping Trade in India.

But we have seen in the first chapter that if the recommendations under the Ten Year Plan are carried out and if India undertakes the schemes of complete Industrialisation, both the export and import trade of India will increase and in course of Ten years' time, we may expect that the combined value of the export and import will

rise to more Rs. 1200 crores i.e. more than about two and half times of the present combined value of export and import trade. The total tonnage that will be required for India's trade will increase from 64 lacs to one crore 'sixty lacs, so that if the present trade demands 800 steamers of average 8000 tonnage, we will require 2000 steamers of the same tonnage to meet the full demands of the trade and the income of the Indian Shipping, will be increased by two and half times of the present income i.e. it will come about Rs. 143 crores in normal years. If India can take at least half of the present and future increased shipping trade she would require 1000 steamers of average 8000 tonnage or about 2000 steamers of average 4000 tonnage within ten years time.

White Paper and Shipping Trade.

The proposals of the White Paper giving the English merchants equal status with the Indian merchants will set at rest all the agitation in favour of reserving coastal trade to the Indian Shipping Companies. Good, bad or indifferent, we have to take the facts as they are. In Shipping trade, previous attempts have been made by several Indian Shipping Companies to have a share in the coastal trade, but the unfair

Commercial
safeguards

competition of the existing fabulously rich British Companies killed those companies. So any attempt for a big shipping Industry in India must take lessons of the previous failures in the line and should make ample provision against possible future competition in the line. If under the provisions of the White Paper reservation of Coastal Lines for Indian shipping be not allowed, Indian Shipping Companies must be placed on equal footing with the British shipping : i.e. either they will be taken in the Ring or the present Rebate system must be done away with. The Commercial safeguards for the British Companies cannot place the Indian Shipping Companies in unfair position.

Rebate System and the Shipping Trade.

How jealously the present Ring of the shipping

The cause that led to the formation of Ring and Rebate system.

companies guard their interest in the shipping trade is well illustrated by the introduction of Rebate system by which the shippers of goods get certain per cent, usually 10 per cent rebate in the freight after a period of six months provided they do not book their goods in any steamer other than belonging to the present shipping Ring or Conference. In American shipping laws they do not allow any such inequitious Rebate system.

If any shipper book any goods in any steamer other than that of the Ring Lines he not only forfeits the Deferred rebate, but is also not entitled to the Rebate already earned. In this way the present shipping Ring Lines tie the hands of the shipper, leaving him no option to resort to other lines. The causes that led to the introduction of this Rebate system can be gathered from the evidence of Sir Thomas Sutherland, the Head of the Peninsular and Oriental Steam Navigation Company Ltd. before the Royal Commission on shipping Rings.

“ Conferences, pooling arrangements and Re-
 Evidence of Sir Thomas Sutherland before the Royal Commission on Shipping Rings. bates were unknown in the Eastern trade until some years after the Suez Canal was opened. The carrying trade was free at all points to whoever might choose to put his capital into it, and yet rates of freight were then higher than they have been since. This state of affairs was due to the fact that the supply of steam tonnage was then limited. But, in a very few years an entire change in the situation was evolved by what was called the compound engine, and the tonnage in the Eastern trade soon outstripped its requirements. The natural result was impoverished rates

and a struggle for existence which led to several lines withdrawing from the field, although they had entered under fair enough auspices. It was in the late seventies that the remaining lines, then engaged in a hand-to-hand competition, began to draw together so as to stave off disaster by coming to arrangements between themselves and with their customers."

We may find from the minority report of the Royal Commission on Shipping Rings how the shippers are tied down to the Ring Lines—

"Under the Deferred Rebate," says the
How Rebate System ties down the shipper perpetually. Minority of the Royal Commission on Shipping Rings "a number of Shipping Companies combine to secure a monopoly of a proportion of the shipping trade. They affect their object by undercutting their competitors (if any) in freights until they have driven them away, and further by agreeing among themselves to charge the same rates of freight and to return a fixed percentage of all freight, after a certain lapse of time, to all "loyal" shippers, i.e. those shippers who have not shipped any goods by steamers not belonging to the Ring. Matters are so arranged that the Shipping Companies always have a portion of the returnable

freight in hand. Consequently the shipper can never free himself from the Ring, even if he can find a steamer, not belonging to the Ring, which is willing to carry his goods, except by submitting to a sacrifice. Unless a very large shipper, he cannot charter an entire vessel. He cannot, as a rule, afford to lose his rebates ; and so in this way he is permanently tied to the Ring. Even if the rate of freight has been changed while the Deferred Rebate is in hand, the Conference claim to retain it if their customer ships by an outside steamer."

Chamber of
British shipping
is dead against
the Rebate
system.

Even the Chamber of shipping of the United Kingdom is dead against all the rebate system adopted by the British Shipping and other Shipping Companies to the Ring Lines as an artificial means to capture the freight market. They have condemned the Rebate system as will be found from their following report as made in 1932,—“Free access to an open freight market, that is freedom to traders to use the most effective and efficient carrying power that is available is essential to the prosperity of international commerce.

The British shipping Industry, in the interest of this country and of the Empire, should adhere to the policy of freedom of seas, on a footing of

equality to all ships, under all flags, in all Ports, in all international and in all inter-Empire trades and in so doing it will not only serve the interest of British trade but of the trade and shipping of the world. "

The Principal Shipping Rings and Their Nationality

Line	Nationality
Europe—South Africa	British Danish German Swedish
United States—South Africa	
India—South Africa	British
Europe—Australasia & New Zealand	.. British French German
Europe—Straits & Far East	Austrian British Danish Dutch French German Italian Japanese Russian Spanish
Europe—India and Colombo	British French German Japanese

Line	Nationality
Europe—South America (East Coast)	.. British French German Italian Spanish
Europe—West Indies and Islands	.. British Danish Dutch French German Italian Spanish
Europe—South America (West Coast)	.. British French German Italian
Europe—North America	Austrian British Spanish Dutch French German Italian Norwegian Swedish U. S. A.

The following figures compare the rates from
Bombay to United Kingdom and from Calcutta

to United Kingdom. It is to be noted that in Bombay no Rebate system exists but it has been introduced in Calcutta since May, 1919 :—

		Bombay.	Calcutta.
1st	December, 1920	.. 56s. 3d.	115s.
15th	December, 1920	.. 43s. 9d.	115s.
3rd	January, 1921	.. 31s. 3d.	85s.
15th	January, 1921	.. 31s. 3d.	70s.
1st	February, 1921	.. 31s. 3d.	70s.
15th	February, 1921	.. 31s. 3d.	55s.
1st	March, 1921	.. 31s. 3d.	55s.

Now this Deferred Rebate system is a formidable obstacle in the way of growth and development of the Indian Mercantile Marine. There are two courses open for the Indian Shipping Industry—

First—An act to be passed by the Central Government making Rebate system illegal as in the United States of America—so that the Indian Mercantile Marine can stand on equal footing with the already existing Ring Liners. Rate-cutting in Passenger fare in the coastal lines have been stopped by the recent Act. Why not follow the same thing as regards freight? Besides the impediment in the way of growth of National Mercantile Marine, Government loses heavily by way

of Income Tax. Though 20 p. c. of the freight is at present assessed by way of Income Tax there are chance of evasions. None of the shipping companies belonging to the Ring are Indian Companies, the Government suffers 'a loss to a very heavy amount by way of Income Tax and Super Tax. Had the companies been Indian—the Government Revenue under the head of Income Tax would greatly augment. The Ring Liners should not grudge the equal facilities in the Indian trade and release their choking grip. It is just like fighting of a coward with a gun after disarming his opponent.

Secondly—The second course is flooding the Indian waters as well as in other continental sea routes with good number of the Indian ships—say 50 to 100 vessels from 4000 tons to 15,000 tons. This step will have two effects, either the Ring Liners will be forced to take the new entrants into their blessed Ring or they will agree to the cancellation of the much maligned Rebate system. A bold front if presented in the above way will have the desired effect.

Thirdly.—The safeguards that are proposed in the White Paper while placing the British Companies on equal footing with the Indian Companies

do not mean an unequal status for the Indian Companies. So Indian shipping would be placed on equal footing with the British shipping in coastal ports, i.e. either they would be taken in the Ring or the government would do away with the Deferred Rebate system. This is the implication in the safeguards as mentioned in the White Paper, and it will facilitate passing of a new shipping Act.

Capital of the Shipping Industry.

We have seen that to capture at least half the present and future increased export and import trade of India, India would require at least 2000 steamers of 4000 tons to 15,000 tons in course of ten years time and the total capital for the purchase of the ships will be about Rs. 90 crores i.e. at the rate of Rs. 9 crores a year for ten years. Now as India will launch on a big ship building Industry as stated in the next chapter, it should be so arranged that after the purchase of the necessary ships for the first and second years all the ships that India would require can be built from their own ship yards. We have tried to see in the next chapter that cost of building a ship in India would be less than the cost that is required to build ships in England, Germany and America.

The principal ingredients in ship making we mean the labour, steel plates, iron, copper and wood would be cheaper in India than in the foreign countries and from the third and subsequent years the requisite number of vessels can be ordered and supplied from the ship yards of India. So the shipping Industry will necessitate opening of ship building Industry which again will require opening up fresh steel factories in India. Of course, in the beginning, the present Tata's factory will be able to meet the requirements of ship building Industry. But with the growth of that Industry along with the growth of motor car Industry, Locomotive and other rolling stock industry and heavy machinery industry, India would be requiring gradually 10 to 12 big steel factories to cope with the demands.

How to Raise the Capital of Shipping Industry.

The capital for shipping Industry can be raised in two ways-

First—There are over 200 Native princes in India. These Native States are financially autonomous. Some of the advanced Native Chiefs have got already some industries—such as cotton mills in

How Native
princes can help
development of
Indian Shipping.

their States. Now-a-days the princes of the advanced States are taking increasing interest in continental tours and are spending a good deal on such tours. Now the tours they take are mostly in the ships owned by the foreigners. It will be more self-respecting for these princes if they can make the tours in the Indian mercantile marine which will be in position to cater in a better ways to their needs and requirements. This is one side of the question. Besides that the shipping Industry is a very paying Industry and if the Development Trust Act is passed and if the Native Chiefs take advantage of registering corporate bodies under the above Trust Act as they do in case of Indian Companies Act and Co-operative Act—then they will be in a position to contribute several steamers to the Indian shipping Board. The average cost of two cargo steamers and one passenger and cargo steamer of say 4500 tons would not cost more than 30 to Rs. 35 lacs and if the sum is raised from their States people on a minimum guarantee of 5 per cent. then the yearly charge on their revenue will not be more than Rs. 1 lac 50 thousand to Rs. 75 thousand. Besides the money of their subjects most of the Native States have got a decent purse which is known as Privy purse, which they can

contribute towards the shipping Industry in India. So if the Native States of India can be interested in the shipping Industry at least one hundred Native Princes can contribute on an average 3 steamers, some 300 steamers for the Indian mercantile marine. This is the most favourable time to make a proposal as above as the talk of federation of the Native Princes with India is maturing and eventually it may materialise. If a favourable circumstances like the above arises the only question will be the division of 20 per cent. Income Tax assessed on the freight that the India Government takes in the Indian ports, most of which are under the Central Government. The ships that the Native States will contribute will be directly under the shipping Board of India, who will manage and employ them as they think best. By this way 300 ships in the Indian waters as well as in continental routes will have tremendous effect on the existing Ring Liners, who may be forced either to take the National Mercantile marine in their Ring or will be a consenting parties to do away the inequitious Rebate system. If the Native States can be induced to take interest in the Indian mercantile marine, well and good; if not, the whole amount of yearly expenditure of Rs. 9 crores should be raised in India on a minimum guarantee of 4 per cent.

interest and an addition 1 to 2 per cent., on the profits by India Government. Another important reasons for the Government to interest itself in the growth and development of Indian Shipping Industry is that heavy financial commitments by way of interest on the capital investment on the several ports of India have been made by the Government. And it is a fact that the several Port Trusts are feeling the burden of interest and the interest is paid out of the Central Revenue. This heavy expenditure specially increased after war was in expectation of heavy Shipping Traffic which is not fulfilled. So the losses suffered by the Government can be made good by the profits in running ships under Development Trust. There is nothing new in the suggestion—in the Railways the capital expenditure is about 800 crores for over 42,700 miles of Rail Road—some of the Lines have been acquired by the Government and in some Lines the capital has been raised on the guarantee of minimum interest by the Government. Recently owing to depression and the competition of Buses—the income of railways in India have suffered and they are running at a loss of about Rs. 9 crores—and the Central Government though getting the required interest from Depreciation Fund of the Railways will have to

meet that loss out of its Revenue. In order to recoup that loss the Government is passing an Act restricting the Bus competition.

But the losses the Government is suffering owing to the expenditure of Port Trusts would be amply recouped if the Indian mercantile marine is started on capital raised on the guarantee of the Central Government along with the Native States—if they choose to come. Now let us see the charges on Central Revenue for interest on capital and other expenses for development of Railways :—

In crores of rupees—

1923	1924	1925	1926	1927	1928	1929	1930-31
14.32	14.88	24.92	25.99	27.42	29.44	30.50	32.90

Profits of the Shipping Trade.

The profits on the shipping trade is quite high as is evidenced by the growth of Shipping Industry in several countries—such as in England, America, Japan, Germany and other countries. Some countries allow sub-ventions or subsidy to some shipping companies but in majority of cases the shipping industry is a very paying one without any such subsidy or bounties. If we examine the market value of the shares of shipping companies in several countries it will disclose from the market

quotation of these shares the profit earning capacity of the shares. We quote below from the evidence given by Mr. Hazi before the Indian Deck Passenger Committee, which evidence was not contradicted by the two members of the Committee belonging to the British Shipping interests.

The following is a voyage estimate for a Passenger steamer (1000 Deck and 50 Cabin Passengers) with a cargo capacity for 3000 tons running between Rangoon and Calcutta with rice and Jute respectively.

Expenses for a Round Voyage of 20 Days.

Upkeep (including repairs) and			
Insurance	..	..	Rs. 23,500
Bunkers 460 tons at Rs: 17			
per ton	..	..	7,820
Port charges	..	..	3,200
Stevedoring	..	..	3,800
Dunnage	..	..	500
Claims	..	..	1,000
Sundries	..	..	1,500
Management expenses		..	2,000
Total ..			<hr/> 43,570

Earnings.

Freight money for 3000 tons at			
Rs. 14	..	Rs.	42,000
Passage money	..	„	31,000
			<hr/>
			Rs. 73,000
<hr/>			
Profit per trip	..	Rs.	30,000
Per year for 16 Trips	..	„	4,80,000

If the value of the steamer be taken at £1,000,000 at the rate of £25 per ton, the cost of the ship will be Rs. 1,350,000 or thereabout. So the net profit after allowing for depreciation at 5 per cent. will be more than 30 per cent.

Let us see how Japan is developing her shipping Industry and earning the profits on the Shipping Industry—

Year	No. of Cos.	Paid up Capital.	No.	Tons gross.	Earnings.	Dividend.
1906	13	4,316,700	344	491,258	3,269,565	9.23
1907	6	5,713,157	537	527,766	3,883,272	7.37
1908	18	5,927,150	543	564,179	3,877,347	7.10
1909	20	6,005,018	538	575,872	3,748,770	6.28
1910	20	6,144,257	535	600,042	4,89,140	6.43
1911	20	6,163,630	454	648,866	4,489,431	7.87
1912	18	6,065,101	419	702,738	5,190,030	9.11
1913	23	6,248,400	582	785,190	5,963,042	9.41
1914	24	6,525,800	578	841,931	5,796,573	8.11
1915	24	6,579,650	608	895,615	7,584,541	13.10
1916	28	8,047,500	603	980,793	15,190,436	26.11
1917	52	17,420,000	803	1,127,483	29,513,179	41.33
1918	65	26,988,250	1496	1,386,642	63,845,195	36.00
1919	56	26,932,827	1542	1,397,183	56,457,500	27.96

The increase in the number of companies, increase in number of ships and tonnage, the increase in profits are the order in which the shipping industry in Japan has developed.

Shipping as Career of Young India.

We have seen that the Indians from the early periods were good seamen and the sea career of the Indians continued for about 3000 years till the middle of the last century. There were then sailing vessels. They braved all the dangers of the sea for trade and colonisation. The early shipping career of the Portuguese, Dinamar (now Dutch) and some other European nations are known as Pirates. The Rodda depredations as Pirates on the coast of Bengal is a well-known fact. Rodda or Captain Rodrick was subsequently captured by Pratapaditya of Bengal and was made the Admiral of his fleet. He served faithfully, specially in his campaign against the Moghul invasion of Bengal and history records the successive defeats of the vast Moghul army against Pratapaditya. The activities of these Pirate ships can be compared with the activities of the frontier tribes as regards plunder and loot of their neighbours. But during this long period of sea life for about 3000 years, there is not a single instance to show that the Indian seamen soiled the good name

of India by any misdeeds. The present seamen are all *lascars* of the British ships, recruited chiefly from the Chittagonian Mohamedan class. They are uneducated and present an uncouth appearance before the world at large. They begin as *ldscars* and remain so all their life.

In the Shipping Industry under Development Trust, we want the middle class Indians to take to sea life and they can be only attracted if they have got prospects before them—we mean the prospects of being ship's officers and captain. The risk of sea life is very very small now-a-days. The health on sea is better than most of the provinces in India. The educative value of visiting foreign lands—which the uneducated Indian *lascars* can not take advantage of, the broadening of vision and all that is best in foreign travel can be acquired by these educated young men of India and the Indian Society will get a distinct advantage, not only monetary but cultural, through the association of these young men with the foreign countries. These educated young men will visit the foreign lands with their eyes open, which will greatly facilitate trade and emigration in those countries.

Shipping career
of educated
Indians will be
a distinct gain
for India and
will ship
emigration.

The Income of the Sea men—Let us take the present income of crews as well as officers in a ship say of 7400 tons D. W. It is usual to have five Engineers and four officers exclusive of the master of the ship, while the member of crew approximate about 55 men consisting of 22 deck hands, 24 men in the engine room, eight stewards etc. for the saloon and one carpenter. If European crew is engaged, instead of 55 men only 28 do the same work. A vessel of 4300 tons D. W. requires 4 Engineers and 4 officers and about 39 crews. So we see that the monthly expenses of a ship of 7400 tons is the following :—

**A Monthly Wages and Victualling Bill for a
7400 ton D. W. Steamer.**

	European Officers and Crew			European Officers & Indian Crew		
	Rs.	A.	P.	Rs.	A.	P.
Wages of officers	2,762	0	0	3,480	0	0
Messing of officers (£8 per officer per month £1 is taken at Rs. 15/-)	1,080	0	0	1,080	0	0
Wages of 28 crews	3,920	0	0	1,700	0	0
Messing for crews (at the rate of £ 3 per head per month)	1,260	0	0	1,083	0	0
				(at 19 11 0 per head per month).		
	<hr/> 11,022	<hr/> 0	<hr/> 0	<hr/> 7,343	<hr/> 0	<hr/> 0

So there is an extra expenditure of Rs. 3700 per month in a steamer where European crews are employed without the overtime allowance—an overtime allowance of 1s. 6d. to the European crew and 2s. 6d. to officer for every hour of work in addition to eight hours per day is now payable and may amount to Rs. 1,500 or Rs. 2000 per month per steamer. The wages of Indian crew is Rs. 30 to Rs. 31, whereas the wages of European crew is Rs. 140 a month. The messing charge of Indian crew is Rs. 17-4-0 per month, whereas the messing charge of European crew is Rs. 45. When the educated youngmen will be attracted to sea life, there would be a reshuffling of the present arrangement. In keeping the present quota of India crew, if the monthly wages is fixed at Rs. 50 plus Rs. 30 as fooding charge, the expense under the head of crew comes to about 4400, plus the pay and allowance of Engineers and Officers which being partly Indianised will come to a figure not more than Rs. 7500, per month.

**Number of Men that can find Employment
in Shipping Trade.**

On an average of 64 men inclusive of officers and engineers are required for 8000 tons D. W.

and whereas 47 men are required for a vessel of 4800 tons D. W. If the average tonnage be of 4800 then the number of steamers that will be required will be about 2000, so that the number of Indian that will find employment will be about 94,000, roughly speaking about one lac ; and when leave and absence are taken into consideration another 25,000 will be required. So the shipping trade can find employment to about 1,25,000 young educated Indians with decent monthly pay. In addition to the above the companies carrying the ships being registered under Development Trust Act can pay by way of bonus a decent amount on the profits of the workings of the shipping companies to their workers.

Constitution under Development Trusts.

There should be one Shipping Board for India with a Commissioner, on a decent pay say Rs. 10,000 to start with. Any German or American having an expert knowledge in the shipping trade will do well in the post. He will be assisted by Board of experts in the shipping trade. The profit on the workings of all the ships will be taken together. Any isolated action will lead to unhealthy competition and will end in disaster. So all the ships of Indian Nationality

will be managed and guided by one Central Organisation and the purchase of the ships and its management and division of profits or otherwise will be made by one Central Organisation, namely—"The Indian Shipping Board."

Allocation of profits.—If the average income of shipping trade be put at 15 per cent after payment of 4 or 5 per cent on interest account on the capital guaranteed by India Government or Native States and after creation of capital redemption fund at a rate not less than 5 per cent so that the capital can be paid back in 10 years to 15 years time—a bonus at the rate of $2\frac{1}{2}$ per cent on the profit may be given to the workers engaged in shipping lines and the balance of $2\frac{1}{2}$ per cent can be allotted in the following—1 per cent to be paid to create a provident fund and the balance of $1\frac{1}{2}$ per cent for reserve fund. But usually the income will be more than 15 per cent so that capital redemption fund and workers will necessarily get more.

CHAPTER VIII.

SHIP BUILDING IN INDIA.

We have seen that the development of India's shipping requirement. Shipping Industry in India would necessitate the opening of Ship Building and Ship repairing yards, and if we can capture at least 50 per cent of the present and future increased shipping trade, India would be requiring 80 lac tons D. W. *i.e.* 8 million tonnage under the Ten Year Plan, *i.e.* at the rate of 8 lacs tonnage a year for ten years. We can meet the demands of the first two years by purchase of requisite number of mercantile marine from the foreign countries. But the demands of the third and subsequent years can be met from the vessels constructed in the Ship Building yards of India. So to meet its own demands, India would be required to build ships of about 6½ million tons. But if we compare the chief ingredients for ship building, we will find that India can build ships at a less cost than most of the ship manufacturing countries. Under the circumstances it is but natural to expect that India would in course of years, be able to secure orders from outside for ship building. So

in course of time it can be expected that the Ship Building Industry will flourish in India. It is a pity that the attention of our nation has not been drawn to this one of the most paying industries. A country that can supply labour at a smaller wages and can command the principal materials of ship building and that at a comparatively cheap price can make a great headway in the industry.

Raw Materials for Ship Buildings.

We would do better to quote from the document on 'Ship Building' issued by Inter-
 League of Nations' Report. national Economic Conference under
 the League of Nations.

“ The ship building industry is a finishing and assembling industry in the sense that a great part of its materials, whether derived from iron, copper, lead, etc. and to some extent even from wood, does not come into the industry in a raw state but in the shape of semi-manufactured articles. It (ship building industry) is therefore a large consumer of products of other industry, and a depression in ship building and marine engineering affects other industries, specially the iron and steel industry. The following are usually delivered to the British Shipping Yards in

a comparatively finished condition :—Auxiliary machinery, such as wind-lasses, winches, steering gears, pumps, electric generating plant and refrigerating machinery ; as also small fittings, scientific instruments, and furnishing of all kinds from the wood working and allied trades. But by far the most important element is semi-manufactured iron and steel. Information supplied to the British Committee on shipping and ship building Industries, after the war showed that the total quantity of steel materials (including plates, sections, forgings, casting, etc.) used for new ship construction in 1913 in the United Kingdom was 1,400,000 tons and that the weight of ingots used in the manufacture of these products was about 1,850,000 tons.

These figures are independent of materials used for repairs. As the total quantity of steel ingots consumed in the United Kingdom in that year was 6,325,000 tons the ship building and marine engineering industries would account for 29 per cent of the total. These estimates take no account of iron, though iron materials are largely used in marine engineering nor do they take account of materials used in Admiralty Dock Yards".

The Joint Enquiry of the ship building Employers' Federation and the Ship yards Unions into the conditions of the British industry reported in 1926 that for many of the materials required for ship building, particularly in cases where ship building is a market on which they are largely dependant, no complaint could be made on the prices quoted. But for lead and paint materials, upholstery, ropes, electrical cables, light castings and sanitary ware, the increase over pre-war prices ranged from 100 to 200 per cent. "The Committee is satisfied" runs the report that prices are fixed at this unreasonable level by means of rings and price-fixing association; and that as regards some of the articles, arrangement between manufacturers and merchants are such that it is practically impossible to buy direct from the manufacturers. In Denmark the material used in the industry (ship building) for the year 1924 was 10,000 tons iron, 13,000 tons scrap irons and 228 tons other materials.

The above shows the materials that are required for construction of the ships but besides these materials, labour is paid handsomely in the ship

Report of other
ship building
Federation.

Wages of
workers in ship
building
industry.

building Industry. Let us quote from the 'ship building' document as published by International Economic Conference under League of Nations :—

**1. THE NUMBER OF PERSONS EMPLOYED
BY DIFFERENT COUNTRIES IN SHIP
BUILDING INDUSTRY.**

In Great Britain.

	July, 1923	July, 1926.
Ship building and repairing ..	270,200	224,120
Marine engineering ..	66,300	58,370
Total ..	336,500	282,400

In United States of America.

	1914	1919	1921	1923
Steel ships ..	33,508	144,014	93,323	51,961
Wooden ships ..	10,981	43,432	13,122	10,336
Total ..	44,489	387,448	106,445	62,297

In Germany.

In 1925.	In 1926.
36,809	29,000

In France.

In 1906	In 1926.
21,926	20,000

2. THE WAGES PAID BY THE DIFFERENT COUNTRIES TO THE WORKERS IN THE SHIP BUILDING INDUSTRY.

Great Britain (47 hours a week).

Grades of workers.	Rate per hour.	Weekly earnings.
Skilled workers ..	14s. 17d.	55s. 6d.
Semi-skilled workers ..	10s. 60d.	41s. 6d.
Unskilled workers ..	9s. 93d.	38s. 6d.

United States of America.

In Dollars (weekly earnings).

1914	1922	1923	1924	1925	1926
14.35	34.10	34.10	32.19	34.50	31.50

In Germany.

(weekly earnings.)

Skilled men.	Semi-skilled men.	Unskilled men.
35s. 8d. to 37s. 10d.	32s. 11d. to 35s. 1d.	28s. 1d. to 30s. 3d.

Nether-Lands.

44s. 6d.	38s. 9d.	33s.
----------	----------	------

So it is found that the monthly income of the skilled worker in ship building industry varies from Rs. 400 in the United States of America to Rs. 165 in Great Britain and unskilled workers from Rs. 360 in America to over Rs. 100 in England and if Indians are engaged in ship building industry, the expenditure under the head workers will not be more than 50 per cent as spent by other ship manufacturing countries.

Secondly—Price of the principal raw materials such as iron, steel and wood will be much cheaper in India than in those foreign countries. So it can be expected that India would be able to build ships at a less cost than most of the ship building nations and as such demands for the Indian ship will be more in the foreign market. India's yearly demand will be 8 lacs tonnage.

If the steamer be of average 4000 tons D. W. the yearly requirement will be 200 ships. To build 200 ships a year India would require about 30 to 40 ship-yards of different size and capacity and if India is fortunate to secure orders from outside for its ships, opening of more shipping yards will be necessary.

The world tonnage, out of which the ships which are more than 20 to 25 years are the following—

As per Report of the International Economic Conference.

**Existing Tonnage of 25 Years of Age and
Over 30th June, 1926.**

	No. of ships	in thousands Tonnage
Great Britain ..	1558	1676.3
Germany ..	392	418
United States ..	419	614
Sweden ..	579	408
Italy ..	386	756.9
	<hr/> 7247	<hr/> 8,805.7

So 7247 ships of about 9 millions tonnage being old and unserviceable should be scrapped and with the demand of the trade, should be replaced and in every year some ships being old are to be scrapped. So if ship building is undertaken by India and if ships can be built at a less cost, then there is every possibility of getting good orders from other countries for the supply of ships. Usually ships are placed in the following broad categories—

- (a) Oil Tankers—to carry oil.
- (b) Motor ships—driven by motor.
- (c) Cargo steamers—to carry goods only.
- (d) Both cargo and passenger steamers—to carry both passengers and goods.

The cost of the cargo and passenger steamer is greater than a simple cargo steamer.

We have seen elsewhere that a given tonnage of cargo and passenger steamer cost more than simple cargo steamer owing to speed, draft and special construction in case of the former.

AS PER LYODD'S REGISTER.

A. Oil Tankers gross tonnage of the World.

1914 ..	..	..	1,478,988
1919 ..	..	..	2,929,113
1920 ..	..	..	3,354,314
1921 ..	..	..	4,418,688
1922 ..	..	..	5,062,699
1923 ..	..	..	5,203,601

The gross tonnage is increasing in every year.

B. Motor Vessel gross tonnage of the World.

	No.	Gross Tons.
1914 ..	297	234,287
•1919 ..	912	752,106
1920 .. •	1,178	955,810
1923 ..	1,831	1,668,414

C & D. The number of ships of the world over 1600 tons D. W. in the year 1914 was 8,445 with total tonnage 35,145,000. But if the sea-going steel and iron steamers and motor vessels of 100 gross tons and over, are taken the world tonnage are in—

1914—42,514,000

1923—57,939,000

Price of the Tonnage.

The price of the tonnage varies according to the ruling freight rates. If the freight rate is higher—the value of the tonnage goes up—if freight goes down, the price of the tonnage falls along with it.

Variation in Price of Ships.

There is a great fluctuation in the prices of ships. The value of the ship varies according to the rate of freight. If the rate of freight in certain time is higher the price of the ship goes

up, if it is low the price goes down. So like other commodities the price of the ship depend upon the world condition of trade specially on the freight market. We have seen in the last Chapter the great fluctuation in the freight market 'from 33s. 3d. in 1900 to 1000s. in 1918,

Value of Ships varies with freight trade.

The following is taken from Mr. Hagi's "Economics of Shipping" :—

Taking for our standard a new, 7500 tons dead weight, single deck steamer, 380 feet in length by 49 feet in breadth and by 29 feet in depth with a draft, fully loaded of 23 feet 8 inches, we find that its value in Great Britain has fluctuated from £36,000 i.e. £4-16-0 per ton in the middle of 1908 to £2,32,500 or £31 per ton in December, 1919.

It is worth knowing however that the highest price ever paid for such a vessel before the Great War was in 1900 when the price of the standard steamer which, towards the end of the last century was fluctuating round about £50,000 suddenly, jumped up to near, £61,000. There was an equally sudden fall which was, with various unimportant exceptions, practically not arrested

until the record year of low values 1908, A. D. Freights, however, began gradually to improve and a 7500 D. W. tons steamer was sold at £58,000 in November of 1912 when again the ebb set in and it is believed that the tonnage value of new single deck steamer would have again reached in a few years the very low figure of 1908 had not the Great War, with its high freights, caused the shipping values to soar to unexpected heights and rendered possible a record in the other direction. With the Armistice, however, the prices of ships again began to fall so that a 7500 D. W. ton steamer with the specifications given above may be purchased to-day at a price ranging between £65,000 and £70,000, i.e. at about £9 per ton dead-weight. There lies an intimate relationship between the ruling freight rates and the shipping values.

It should be noted that the value fluctuations, the bare outline of whose history has been given above, refer merely to a standard steamer of 7500 tons dead-weight with certain measurements. However the size, draft, speed and other special specifications of a steamer also affect in varying proportions. In calculating detailed

Size, draft, speed and other special specifications are the determining factors of the price of steamers

price care to be taken when ordering the construction of a steamer, will be partly seen from the following instructive summary of the effects of specifications on prices taken from a well-informed article in the annual number of the "Fairplay" for 1921. As regards the influence of size upon the price of a steamer it is stated that if an 8,000 tonner is taken at a certain basic rate per ton, it is found that for a similar class vessel, but reduced dead weight, at 4,600 tons, the rate per ton has increased by £1. Another addition of £1 is experienced at 3,500 D. W. and further additions of £1 each time are found at dead weight of 2,750, 2,250 and 1,900 while below this the rates per ton increase at a very rapid rate. The paradox is, of course, easily understood if it is remembered that the cost of the various articles required to build a steamer does not vary in proportion to their size.

Besides the differences in dead-weight tonnage, draft is another important factor affecting the values of merchant ships.

How Draft
affect the price
of ship.

A vessel to carry 6,000 tons dead-weight on 22 ft. 6 in. draft could have length and breadth of 339 ft. by 48 ft. but, if it is desired to carry the same dead-weight on only 21 ft. 6 in. draft,

it will be necessary to increase the length and breadth to 348 ft. by 49 ft. 3 in. The depth would, of course, be reduced by about 1 ft. 2 in. but depth, it must be remembered, is the cheapest dimension of the three, length being the most expensive. In fact the vessel of 21 ft. 6 in. draft requires 55 tons of steel in excess of the amount required to build the vessel of same dead-weight on 22 ft. 6 in. As a result of the increased dimensions more timber and possibly more equipment will be required—while the labour cost will also be greater. The net result in a vessel of this size would be about Sh. 4 per dead-weight ton for a change of one foot in draft.

Speed is one of the most expensive factors causing variation in the cost per ton dead-weight. If the speed of a 6,000 ton vessel is to be increased from 10 to 11 knots, other specifications remaining the same, the following alterations have to be provided for:—(a) A finer block co-efficient; (b) an increase of about 39 per cent in indicated horse power requiring larger engines and boilers, the increased weight of which will amount to nearly 100 tons; (c) because of the finer block co-efficient and the increased weight of machinery,

How speed
affect price of
ship.

the dimensions will require to be increased so as to maintain the dead-weight; (d) the increase of dimensions will add an extra weight of about 60 tons of steel.

The net result is to increase the cost of the hull by about Sh. 4 per dead-weight ton, and the machinery by about £3,600 or Sh. 12 per dead-weight ton, or Sh. 16 per ton all told.

Again comparing two vessels of identical dead-weight, although of similar type and specification, but one having a draft one foot shall lower, also one knot more speed, than the other, the difference in value is exactly Sh. 20 per dead-weight ton.

PRINCIPAL SEA TONNAGE IN MIDSUMMER 1914.

1600 G. T. & upwards.

Flag.	No.	Gr. T.
(1) British	4,174	18,197,000
(2) German	743	3,799,000
(3) U. S. A. (Sea and Philippines) ..	513	2,216,000
(4) French	357	1,602,000
(5) Japanese	429	1,496,000
(6) Italian	355	1,310,000
(7) Dutch	263	1,285,000
(8) Norwegian	323	1,087,000
(9) Austrian	230	927,000
(10) Greek	262	771,000
(11) Spanish	229	664,000
(12) Russian	149	531,000
(13) Swedish	183	526,000
(14) Danish	156	466,000
(15) Belgian	66	210,000
(16) Portuguese	13	58,000
	<hr/> 8,445	<hr/> 635,145,000

Location of Ship Building Yards.

Clyde and Tyne form the major Ship Building yards of England. Ship building yards can be started on the side of the Ganges down the Howrah Bridge and in other parts of India—where the transport cost of the iron and steel forgings and wood works will not be prohibitive. Marine Engineering works being part and parcel of ship building should be located near ship building yards.

Constitution of Ship Building Yards.

There should be one Commissioner in charge of all the ship building yards of India. India being totally ignorant of modern ship building process—in the beginning all the Engineering Staff would be foreigners till and until the Indian youths are trained in this line. The Manager with his Engineering Staff should be foreigners. These yards should be started under Development Trust. The capital of the Clyde yards is £20,00,000 private and £70,00,000 of public limited companies. The total capital of the ship building yards of Clyde numbering about 40 yards is about 12 to 13 crores of rupees. So a capital of 20 crores will serve the purpose in the first few years. As these yards

will supply yearly the requisite number of ships to the Indian Shipping Board, the capital of the Indian shipping can be advanced for Ship Building industry in India.

Workers of Ship Building Industry.

About one lac to one lac fifty thousand young men can find employment in the Ship Building and its subsidiary industries with decent remuneration, with the world demand for Indian ships more men will find employment. Beside a monthly remuneration, ship building industry can earn sufficient profit to pay up the 4 per cent interest guaranteed by Government as well as create a capital redemption fund to pay back the capital within 15 years and can pay bonus to the workers on the profit.



CHAPTER IX.

STEEL INDUSTRY IN INDIA.

Steel Industry is the basic industry of the world. The majority of the industries in any advanced country depends upon steel products. Beginning from the pin, needle, spring and finer part of watches to luxurious passenger liners, steel is the principal ingredient. Modern civilisation would have been impossible but for steel.

In transport—The locomotive, rolling stock, rail line, motor cars, ships, aeroplane, telegraph posts and lines—for all steel is the principal material.

In factories—For mass production—all the big or small machineries, the engine, the shaft etc. steel is the basic material.

In agriculture—The tractor, scythe and other agricultural tools or implements are made of steel or iron.

In printing—The printing machines and parts, some of the type (as lead is also used for Lino or Mono printing machines) are made of steel.

In building and Structural Engineering—

The steel frame of a building, the beams, the rafters, the corrugated sheets, the tin plates, bridges, piers etc. are all steel.

In war fare—The guns, the shells, bullets, the war ships, cruisers, submarine and other war material are mostly made of steel.

In house hold—The cutlery, screw, bolt, nut, ring, the sewing machine, safe, bedstead, almirah, chair, table and hundred other things are made of steel.

In Municipality—The water pipes, the electric and gas posts etc. are all made of iron.

In fact steel plays such an important part in the development of modern civilisation that we may call this age as **steel age**, in analogy to the stone age. If we can conceive of a period when all the iron ores of the world would be exhausted we may think also that the fabric of modern civilisation will then crumble to dust. Steel being such an important and potent factor in building up a modern nation, it deserves the serious attention of our countrymen for its development. We have seen that under the Five Year Plan, the Soviet Russia is paying the greatest attention to the development

Modern age
may be called
"steel Age".

of a gigantic steel factory at Magnetogorsk with a capacity of yearly production of 40,00,000 (forty lacs) tons besides other steel factories with 11 lacs tons production. The capital they have invested for their steel factories are 800,000,000 (eighty crores) roubles equal to about one hundred and twenty crores of rupees. In 1913 the total output of steel in England was about 63 lacs tons. In America its biggest steel factory, i.e. Gray Ind produced 30 lacs tons a year with several crore tons from its other American steel factories, the combined and total production of steel ingots and casting in U. S. in the year 1928 amounted to more than 5 crore tons i.e. more than 5 times the products of United Kingdom which produced little over 96 lac tons ingots and casting in 1928 to meet the demands of its several industries, such as ship building, motor car, big machinery, locomotive and other factories. The Tata's Factory in India was producing 3 to 4 lac tons a year with a capacity to produce 6 lac tons through Duplex process. So in order to launch on a scheme of big industrial development India would be requiring 50 lac to 60 lac tons of steel a year and as such starting 10 or 12 steel factories as big or bigger than the present Tata's Factory is the first and primary thing. The present capital of the

Tata's Steel Factory inclusive of the debentures is about Rs. 15 crores. But considering the fact that the Tata's Factory being the pioneer one passed through several stages of evolution in order to incorporate the up to date method and process of steel production—we may roughly assume the capital of new steel factory in India with a capacity to produce 6 lac tons a year at about Rs. 10 crores. So under the Ten Year Plan—the capital investment on steel industry in India would be about Rs. 100 crores i.e. at a rate of Rs. 10 crores a year. But the demand of steel depend upon the progress that India makes in its ship building and other industries.

In 1913 alone the British shipping yard consumed 14 lac tons of steel made from steel ingot of over 18 lac tons. Besides other iron parts—as per report of the International Economic Conference on ship building. Thus in ship building industry alone, England consumed a quantity of steel, equalling three and half years' out-put of Tata's Factory in 1925 which amounted to 4 lac tons or three or four big factories like Tata's were required to meet the demands of steel for ship building industry of England for one year. Of course there are good years and bad years also

and the year 1913 may be considered a good year of ship building in England.

So it can be equally shewn that in motor car industry and jute and cotton textile machinery industry and Locomotive and other industries India would require 10 to 12 steel factories with capacity to produce 50 lac to 60 lac tons a year. If the basic material of all these big industries—we mean the steel—can be produced at a cheaper rate than most of the other steel producing countries, then India can not only meet the demands of its own country but can export and secure the orders of other countries for its manufactured articles such as ships, motor cars, locomotives, textile machinery and hundred other kinds of products from steel. In this way India can raise its export trade to a decent figure. In India the cost of labour will be cheaper than other manufacturing countries and if steel and iron can be produced cheaper then the manufactured goods of India can stand in competition in the foreign market.

How to produce steel and iron cheaper in India ?

The first thing we are concerned with, is iron ores ; most of the ores in England contains 50 p.c. iron. If the ores possess 62 per cent iron, the

ores can be considered as good ones. If they contain more than 62 per cent as can be found in most of iron ores in Tata's factory they can be classed as better ores and if they contain more than 65 per cent iron as in some foreign countries and in India they can be classed as the best type. Besides the iron ores, the steel factory must be contiguous to the coal field from which coal can be had at a cheap cost. So if in any country the iron ores contain, say, 62 per cent iron but the coal field lies at a great distance making the cost on coal higher, the advantage of commanding high grade iron ores is counter-balanced by the high cost on coal. Next to the cost of iron ores and coal, the cost of labour and management charges must be cheaper. To produce cheaper steel and iron in addition to the above, the most up-to-date process must be adopted in manufacture of steel. At present there are four or five methods of manufacturing steel. There are advantages and disadvantages in each method. We get from the Right Hon'ble Aberconny's book on "Basic Industries in U. K."—the chapter on steel industries, in Sheffield, one of the biggest centres of steel and products from steel in the world. "Until recently the four principal steel making processes were followed in Sheffield—namely,—

1. Hunts man process—This invention was adopted by Sheffield in the year 1770 for producing cast steel. Since that time Sheffield ceased to produce iron and this cast steel made a complete transformation of Sheffield trade and she became a steel centre and ceased to be iron centre, which position she held from the 12th century when she produced iron from iron ore in a crude method and made shear, sickle, scissors and other household implements. In the sixteen century, Sheffield had to purchase Danish and Flemish iron for her finer products. After adoption of Huntsman's process Sheffield made a great headway in the manufacture of cast iron. In 1851 the production of cast steel in Sheffield by Huntsman process was estimated at 40,000 tons and in 1881—thirty years after—the production of cast steel rose to 100,000 tons. The cast steel that is produced through Huntsman process possesses the quality of perfect homogeneity but at a great cost of money and labour.

2. Bissemer Process—It was an invention of Bissemer to produce steel directly from pig iron. This process was introduced in America's steel factory which made it possible for America to sell her steel and steel products cheaper in the

market according to the observation of the world famous Carnegie in his book on "Empire of Business". Though America borrowed the process of steel products from the mother country, i.e. England—it was Bissemer process that created American steel a better demand in the world market than the British steel. The defect in Bissemer process is the uncertainty as regards homogeneity. So it is not used now in Sheffield. English steel was daily ousted from the foreign market during Carnegie's time owing to adoption of Bissemer process by American steel manufacture though America still adheres to Bissemer Process.

3. Siemen's process—This process is an improvement on Bissemer process. This process is capable of producing steel of almost any weight up to 100 tons at one operation and in one furnace. The uncertainty as to homogeneity in Bissemer process is absent here. The steel produced through Siemen's process approaches to Huntsman in homogeneity.

4. The Electric furnace—This process produces steel approaching crucible steel in its properties and specially high grade alloy steel.

5. Duplex method—This method has been introduced in Tata's Factory recently and we find

that the production of steel is monthly increasing. Tata's programme is to produce 6 lac tons of steel a year through this process. The production capacity of Tata's Factory till the introduction of Duplex method was 409,716 tons of steel ingots and 1,055,117 tons of pig iron in 1928.

As we have seen that with the growth of modern civilisation steel and steel products are in more demands, so it is the primary concerns of all the nations to produce more steel and steel products. But in this respect the position of India is not an enviable one. In comparison with position of other nations in respect of production of steel only, not to speak of steel products, the position of India is lowest of all. In 1928 United States produced over 5 crore tons of steel ingots and castings whereas India produced only about 4 lac tons, i.e. less than 1 per cent of United States products. The Indians unused to big factories stand aghast at the sight of Tata's Factory where their vision is dazzled. But Tata's Factory is a pigmy as compared to giant production of 30 lac tons of Gray Iron of United States, 40 lac tons capacity of Magnetogorsk of Soviet Russia. Even in 1913 the production of steel ingots of

Steel manu-
facture of India
as compared to
the world manu-
facture of steel.

steel factories of Durhman & Riding is over 20 lac tons (as per book of Right Hon'ble Abercony). There are several big factories of the world each of whose products vary 5 times to 10 times that of Tata's and these factories (except in Soviet Russia where the state capital over Rs. 120 crores have invested in steel factories) are flourishing even without Government bounties. The future steel factories in India should aspire after bigger production than Tata's. Tata being pioneer in the field has done a good and distinct service to the country by training up young Indians in the art of manufacture of steel. Late Sir Jamsedji has shewn us the way. He had got to do a good amount of spade work. His prospecting parties had explored iron ores of better quality in several places. The experience and training of the Indians will make it possible to start steel factories in India with less cost, better efficiency and less mistakes, and time may come when India may not have to import foreign experts for production of her steel. The steel factory of Tata has rendered a distinct service to the Government during war and supplied war materials to the Government at a cost less than six crores of rupees than the market rate—as per Mr. Lovet Fraser's book on "Tata's Factory." " If the Government purchased the

materials at the market price—Tata would not have to borrow capital on Debentures—so would not have to take any bounties from the Government. The interest that are paid on debentures makes the cost of production higher—so tariff duties on imported steel is felt a necessity to compete with foreign steel. In addition to above, the overhead charges and management charges were higher—both of which as per Tariff Board's recommendations, are now being reduced. Over and above these, Tata's are trying to increase its products so that at the end of 1933 to 1934 the steel products may come to 6 lac tons a year.

England's Need of Indian Steel.

If we take the figure of production for 1928, we find that United States of America produced 51,544,180 tons of steel ingots and casting whereas in the same year United Kingdom produced 96,36,300 tons of the same materials, i.e. less than one fifth of American production. Inclusive of India's products of 4 lac tons, Canada's products of 12,29,303 tons and Australia's products of 4,66,000 tons—the total products of steel ingots and castings in 1928 throughout the British Empire is about 1,17,00,000 tons, i.e. about one fifth of

products of United States of America. India is the only country in the empire who can manufacture steel in a bigger proportion. The present world civilisation is a "Steel Civilisation". A reduction in the steel products means less export and less national wealth. So we find that after the war, export of England is dwindling. In order to command a national wealth at a par with America, England and her colonies and dependencies must increase the steel products. The steel products of her colonies as well as of United Kingdom containing 50 p.c. iron generally in her iron ores having reached their maximum, it is now left to the turn of India to come forward with a gigantic steel products for the Empire. The time is fast approaching when India's steel can be exported to England without duty as per Ottawa pact. The export of pig iron from Tata's Factory to England is not considered an advantage—evidenced (by the recent speech of the Chairman of Tata's Factory) as per Ottawa pact.

Besides the export trade, almost all the war materials such as battle ships, cruisers, guns, shells, etc. are made of steel. In each year some battle ships and cruisers are to be scrapped owing to

Indian steel
will be required
for the Empire.

their age. So the demand of the Empire for steel is daily increasing and India is the only country in the Empire to meet the increasing demands.

Japan's Need of Indian Steel.

Japan is usually called England of the East. In 1928 Japan produced steel ingots and casting 19,05,707 tons and pig iron 29,303 tons—whereas India produced pig iron in 1928—10,55,117 tons. Japan imported pig iron from India and other countries 572,902 tons and iron ores 1,842,363 tons and made steel ingots out of them. So Japan's demand of steel is the greatest in the world. If India can start several big steel factories—Japan will be one of the biggest consumer of Indian steel as they are at present of the Indian raw cotton. The greatest rival of India in the Japanese market will be the American steel. So if the future steel factories in India can produce steel cheaper it will have great demand not only in England but in Japan too.

Early History of Iron and Steel Industry in India.

Origin of melting.

It is supposed that ancient India acquired the art of melting and forging iron from the Chinese.

It is, at any rate, certain that in the early ages Indian artificers possessed to a high degree, skill in melting and fabrication of metals. This is witnessed in the wonderful workmanship of ancient weapons still found in India, and the 3,000-year old iron pillar of the Kutub Minar near Delhi, the methods employed in the construction of which are unsolved by metallists of to-day. In the middle ages the craftsman's dexterity was still maintained and India supplied the materials from which the famous Damascus steel blades and gun barrels were made. The Industry flourished till the downfall of Sikh independence in the last century, chiefly for the manufacture of swords and armour.

From the very early period manufacture of iron from iron ores were known to the Indians. Coal was not then known in the market. The early Indians used charcoal for making iron. The old and labourious method they adopted still may be seen in use in India to-day. The village worker in iron melts his ore with the aid of wooden bellows, handled by his assistants exactly as his forefathers did in the days when Alexander the Great raided the Punjab. He knows no better method nor does he tries to know one. The world famous Damascus steel blade of middle

ages was made of "Woolz" produced from Hyderabad. In the early parts Mediterranean countries used to get iron and steel from India. Casting metals as are found in the famous column of Kutub Minar near Delhi is another example of Indian skill in manufacture of iron. "The column is estimated to be three thousand years old and it represents a forging which weighs between 7 and 8 tons"—says Lovet Fraser in his book "Iron and steel in India".

This crude method of melting ore by charcoal was adopted by Sheffield Iron Works in the 12th century. So far they stood at a par with the Indian iron workers. But in 1770 Sheffield Iron Workers adopted Huntsman invention of cast steel, since then Sheffield became the steel centre of the world instead of iron centre. We have seen how by introduction of Huntsman's method Sheffield produced 40,000 tons of cast steel in 1851 and 100,000 tons in 1881. And as Bissemer process as introduced in America, was a distinct improvement on Huntsman—Sheffield adopted Bissemer process for manufacture of steel. They also adopted the subsequent invention of Siemen's method and electric furnace.

Causes that led
to success of
Sheffield and
America.

Here lies the secret of success of the European and American iron and steel manufactures. Though India began to produce iron and steel through crude method some 2000 years before the Europeans and Americans, they still adhered to those old and crude method. The same story as we find in shipping, cotton fabric and silk industries, is repeated in iron and steel industry in India. So up to starting of Tata's steel factory in 1911, India had to import all steel materials from Europe and America. The more one investigates the cause of fall and decline of once renowned industries of India, the more he is convinced of the ignorance and lack of insight of the Indian craftsmen and merchants to adopt the modern methods. To preach in this age any anti-mill theory of Karl Marx is simply ruinous to country's cause. The music of Charka and anti-mill socialism will lull India to eternal sleep.

First Iron and Steel Factory in India.

• The first attempt to produce iron and steel was made by Mr. J. Marshall Heath—a Madras Civilian, who gave up his service in 1824 and started factory at Portnovo in Salem district in

Marshall
Heath's First
attempt in
1824.

Southern Madras. The iron ores were considered to be good ones. But his greatest difficulty was charcoal difficulty—which was then used for melting iron ores. Heath's furnace was capable of production of 40 tons a week. Madras Government advanced Rs. 5,71,000 to Heath's factory. The ambition of Heath was to produce Bar iron which could be exported to England to compete with Swedish iron in England. The cost of manufacture was at that time given at Rs. 45 (£3) per ton for melting and Rs. 53 (£3 10s 8d) for making malleable iron or blooms. As the factory was not going on as it should be, the Madras Government appointed a Commission to enquire into its workings who reported that the Company's affairs were due to the lack of "Engineer of education, capacity and experience". In 1847 and 1850 steps were taken to form bigger Company but India Government was against it. So the scheme dropped. Thereafter the East India Iron Company was started out of the Salem works of Mr. Heath with a capital of £400,000. As they experienced charcoal difficulty they divided the works in three sub-factories in several places but still the charcoal difficulty was not removed—so in 1874 after 50 years, the Company was dissolved. General Mohan R. A. points out in his history

of Portnovo works that in the last stage charcoal difficulty ceased to be the principal cause of failure; what finally shattered the high hopes formed originally was that the rapid growth of iron Industry in England, the more scientific method adopted and the greatly reduced cost of production rendered Mr. Heath's original calculation about the possibility of competition entirely obsolete." Instead of trying English market if the works' production tried to capture Indian market—there was a fair chance of success.

The Second Iron and Steel Works at Barakar.

This factory was started in 1875 at Barakar near the coal fields. It suffered reverses at the outset but since 1899 it passed into the hands of Bengal Iron and Steel Company under Messrs. Martin & Co. of Calcutta and is attaining moderate success. The works can produce 80 tons of pig iron a day.

History of Tata's Steel Works at Sakchi.

Jamsedji Tata—the founder of Tata's steel factory—was in connection with Nagpur cotton mills. He read the "Report on the financial prospect of iron workings in Chanda district" in Central Province as written by Ritter Von Schwarz—a German expert

The initial
difficulties.

who was frequently employed by authorities to investigate iron and coal deposits of India. He was the first to announce the existence of the famous "hill of iron" at Lohara and gave the description of the dimension of the "hill of iron" as three' eight of a mile long, 200 yards broad and 100 to 120 feet high. Tata's active mind was fired by his perusal of Von Schwarz's Report. The mining regulations of the Government at the time were very strict and development of any private enterprise was not looked upon with favourable eye. The unfortunate exclamation of Lord Lawrance, "I know what private enterprise means. It means robbing the Government." "Was the rule of the day specially in mining regulations? Credit is given to Lord Curzon who removed all the inequitious provisions of mining regulations which made it possible for Tata to make any serious attempt for his Steel Factory. Sir Jamsedji saw several times Lord George Hamilton—who was first an under Secretary for India for 4 years and then Secretary of States for 7 years. Lord Hamilton gave him encouragement to start a steel factory in India and promised him all possible help of the Government in the matter. On his return to India Tata took the prospecting license of Lohara and Peepulgaon from Sir Andrew

Fraser, who was then Chief Commissioner of Central Province, who gave him encouragement to start a steel factory in India. While Tata was busy in his prospecting, Sir Earnest Cassel, the great capitalist, who has done so much for development of Egypt, visited Lord Curzon in 1902 to 1903. Lord Curzon advised him to investigate the iron deposits in the neighbourhood of Jubbulpur. Sir Cassel appointed two experts Martin and Louis, who were not favourably impressed with Jubbulpur deposit of iron ore. So Sir Cassel gave up the idea of starting steel factory in India.

In the meantime Tata's prospecting of Lohara and other deposits went on. Lord Curzon got impatient of Tata's dilatory procedure. Sir Dorab Tata and Mr. Weld who prospected Lohara and other deposits got disappointed and the prospecting licenses of other places except Lohara were cancelled. After expenses and troubles of so many years, the prospect of starting steel factory in India was hanging in the balance. How a mere chance played the destiny of future steel factory of Tata is narrated in the following event. Being thoroughly disappointed as to prospect of a steel factory in India, Dorab Tata went to see the then Chief

How a Bengalee geologist spotted out the Tata's present factory side.

Secretary of Central Province. On learning that Chief Secretary was out—he went to Nagpur museum to pass his time. There he saw a map with black mark spotting the iron deposits in Drug district in Raipur. Mr. P. N. Bose, a Bengalee geologist reported in 1887 the rich deposit of Drug district. After seeing the Chief Secretary, Sir Dorab Tata and Mr. Weld hastened to Rajgarh hills and saw Dondi Lohar a hill of 300 feet high. Mr. Weld climbed the height and was astonished to find that his footsteps rang through his feet as though he was walking upon metal. He had found a veritable hill of almost solid iron and there was another hill not far away which was chiefly composed of iron also. On result of analysis of ore $65\frac{1}{2}$ per cent of iron was found. When Sir Thomas Holland visited Dhali and Rajgarh hills—on going half way he said “ I need go no further, I have seen enough. I only wanted to satisfy myself that the rate you propose to work, you have enough ore to last for 15 years with an output of 250 tons a day ”. The samples brought by Sir Thomas, on analysis, was found containing $67\frac{1}{2}$ per cent of iron. The hills are supposed to contain $2\frac{1}{2}$ million tons of ore carrying about $67\frac{1}{2}$ per cent of iron.

Mr. C. P. Perin, when he afterwards visited

Dhali and Rajgarh hills, declared that they were one of the mineral wonders of the world.

After the discovery of one of best hills of iron deposits the next consideration that troubled the Tata's prospecting parties was coal. The factory must be contiguous to coal fields where coal can be had at a cheaper rate. The cost of coal plays another important part in manufacture of pig iron and steel. The present estimate is that one and half tons of Jharia coal produces one ton coke. One and one fourth tons of coke produces one ton pig iron. So to manufacture one ton of pig iron from iron ores $1\frac{7}{8}$ tons of coal is required.

Next to coal there must be continuous supply of water for cooling furnace.

To answer the above requisite condition, Mr. Weld of the Tata's prospecting party selected Padampur on the Mahanadi near Sambalpur as the site for the steel factory.

In the meantime Mr. P. N. Bose who retired from Government service was in the employ of Mourbhanj State. He wrote a letter to Tata Company to inspect the rich iron deposits of Mourbhanj State. Messrs. Perin and Weld were taken to Gourimahishini, Badampahar and Sulapet. The hills were 3000 feet high and they found

enormous and rich deposit of iron ores—nearly as extensive as Dhali and Rajgarh hills. They found here hundreds of acres “ore float” lying loose on the surface which required no mining and simply had to be picked up by unskilled coolies. The cost of mining was very low. Mr. William Seckirk, mining Engineer of London reported that if 15 million tons had been won the property would still be far from exhausted.

So a place near Sini Junction was at first selected but subsequently Sakchi the present site was fixed upon. The Lease of the above property was taken from Mourbhanj State on condition of no royalty for 3 or 4 years, half anna per ton of ore thereafter rising upto -/8/- per ton. The average for the period of contract is $3\frac{1}{2}$ annas per ton. The ores of the place possess iron from 61·85 per cent to 64·33 per cent.

Government agreed to purchase 20,000 tons yearly steel rails of Tata for 10 years and to supply coal at a less railway charge.

The factory being nearer to Jharia coal field the coal, the factory gets, is at a cheaper rate.

‘There was now difficulty to raise the requisite capital. Dorab Tata tried his utmost to raise the capital from England but failed. On the starting of

Difficulty to
raise the capital
and subsequent
success.

Swadeshi movement in Bengal, Dorab Tata thought of registering his Company in India and on August, 27 in 1907 the first prospectus was issued. There was spontaneous response from the Indian public and the whole capital of Rs. 2 crores 30 thousand was subscribed in 3 weeks' time. Mr. Azel Sahlin in a lecture delivered to the Staffordshire Iron and Steel Institute in 1912 described the instant response to the Tata's steel floatation. He says—

“ From early morning till late at night, the Tata's officers in Bombay were besieged by an eager crowd of native investors, old and young, rich and poor, men and women, they came offering there mites and at the end of three weeks, the entire capital required for construction requirement £1,630,000 was secured and every penny contributed by some 8000 Native Indians and when later on an issue of Deberture was decided upon to provide working capital, the entire issue, £400,000 was subscribed for by one Indian magnet, the Maharaja Scindia of Gwalior.”

TATA'S SERVICE IN WAR.

A. Supply of war materials

In a foreward written by Mr. Stanley Reed on 'Iron and Steel in India' by Lovet Fraser

says :—" meantime the war brought to the forefront the greatest of Mr. Tata's enterprise. The armies in Mesopotamia, East Africa and Palestine were largely equipped and maintained from India. Cut off from supplies from East and West, the resources of India could not have been mobilised for the service if the Tata's Iron and Steel works at Jamshedpur had not furnished a continuous supply of rails for the Indian Railways and for the Strategic Line, which allowed our troops to push forward to decisive victory in Palestine and Mesopotamia. Now the war is over, the works destined to form Trunk from which will spring a variety of vigorous industrial branch industries with iron and steel as the base of manufacture"

B. Contribution of Rs. 6 Crores to the India Government.

"In other words by supplying 2,91,562 tons of steel materials to the Government at an average base price of less than Rs. 150/- per ton, this Company made a saving about Rs. 6 crores to the Government"—said Mr. Lovet Fraser in his book "Iron and Steel in India."

Location of Future Steel Factories in India.

It is about 25 years ago since Tata's, no serious attempt was made by any prospecting

party to find out the iron deposits in India with a view to start a steel factory. Tata's was the first and with exception of Mysore Steel Factory and until-now is the last attempt in this direction. Since the last attempt of Tata, the position of India has greatly improved for 'starting steel factories. Besides the opening of railway lines along with the opening of several railway collieries in Chotonagpur and Central Province—collieries have been opened in Hyderabad making it possible for starting steel factory in Salem and in other districts of Southern Madras. The new railway line from Raipur to Waltair port is another distinct advantage for transport of raw materials such as iron ore and coal at a cheap cost. So if any serious attempt for prospecting is made now as was made by Tata, it is possible to select some site for future steel factories in Orissa, Chotonagpur division, Central Province, Madras and in other parts of India. We have seen that inspite of all the expert knowledge of the American steel expert and inspite of the labours of several years Tata's prospecting party could not find out 'the location of exact kinds' of iron ores as well as the site of their factory.' It was the genius and research of one Bengalee gentleman Mr. P. N. Bose

that brought in a ray of hope to the disappointed prospecting party and ultimately it was Mr. Bose who directed the location of Gorumahisini and Badampahar hills of iron ores to the Tata's party. Mr. Bose's name will ever be remembered in Tata's factory with respectful memory.

India's need of its own steel.

We have roughly estimated that to meet the demands of India in its ship-building programme, for its motor car and cycle manufacturing factories, for its big machineries—such as Jute machineries, cotton-silk, silk and cotton waste and for other textile machineries factories, for its paper, soap, matches and hundred other machineries, for its locomotive and railway rolling stock factories, for its building and structural materials factories, for its tractor and other agricultural tools and implements, for its household tools and implements India would be requiring at least 50 lacs to 60 lacs of steel besides iron products to meet its requirement for home consumption within the ten years under its Ten Year Plan and ten or twelve steel factories of the present output of Tata can meet the demands of India.

Besides the above, Indian steel products will be in great demand in other foreign countries. So on an average of one crore of tons of steel would be required for its home consumption and for its export in course of another 25 years time. We have seen that the present civilisation is "Steel civilisation"—the more steel a country can command the more wealth it can acquire. It is not by magic wand that United States of America took away more than half of the gold of the world. It is principally due to the output of steel and steel products that enabled United States to acquire such vast riches. Let us take the figure 1928 (as per the Report of Institute of Steel and Iron Industry of London).

PRODUCTION IN 1928.

	Steel ingots & castings.	Pig iron.
United States of America	.. 51,554,180	28,156,714
Germany .. ..	.. 14,507,013	11,804,330
United Kingdom .. ..	.. 8,519,700	6,610,000
Soviet Russia .. ..	.. 4,152,508	3,280,405
Japan .. ..	.. 1,905,707	29,303
France .. ..	.. 6,532,943	..
Canada .. ..	.. 1,229,303	..
Belgium .. ..	.. 3,906,370	..
Luxumburg .. ..	.. 2,567,108	..
Australia .. ..	.. 446,000	..
India .. ..	.. 409,710	1,055,117

So regarding the output of steel, the combined
 Steel produce of America in 1928 is more than the combined output of the world.

output of the world in 1928 does not approach the output of United States. Hence it is not unnatural for United States of America to draw, like sponge, the major portion of the gold hoardings of the world and if this state of affairs is allowed to continue, we are afraid, most of the gold of the world will fly to America. England and her colonies have reached the maximum of their output of steel and iron. It will be to the advantage of England as well as of the Empire to encourage India for starting sufficient number of steel factories to cope with situation so that England and her colonies can maintain not only their present financial position, but their position as a first class power.

Constitution of future steel factories.

There should be one Indian steel and iron Board under the charge of an expert assisted by few Directors with the knowledge of steel and iron manufacture and connected with other business. The monthly pay of the Commissioner in charge of the Steel and Iron Board can be settled according to his qualification; and we think Rs. 10,000 a month will serve the purpose.

The factory will be in charge of a Manager. We think we can get now a qualified man from Tata on Rs. 5000 a month. The new steel factory can be started with less overhead charges. The Commissioner under Development Trust Act will supervise and inspect all the steel factories under the said Act and his monthly pay and allowances would be contributed by several factories.

Profits of future steel factories.

A country which can command the best type of iron ores contiguous to coal field can earn good profit on its steel and iron business. Tata's example in this direction is not the sure guide. The overhead charges and other expenses in Tata's factory being very high (as per report of the Tariff Board)—the future steel factory in India should try to avoid those expenses. It will not be bold statement to make that under similar condition as Tata's—a new steel factory can earn now a profit of at least 15 per cent in normal years and if the required capital of Rs. 100 crores is raised at the rate of Rs. 10 crores a year under Development Trust at 4 per cent minimum guarantee of interest—the profits of the factory will not only pay regularly the interest but can create a capital redemption fund which will pay off

the capital amount within 15 years. As per terms of companies under Development Trust, the subscribers to the loan as well as the workers can get a decent amount in shape of bonus at the end of the year out of the profits of the companies.

**Number of Workers that can get employment in Steel
Factories in India.**

Sheffield alone employ 80,000 to 90,000 workers in normal years—as per statement of Right Hon'ble Abercony. If Tata's and its subsidiary businesses can employ about 20 to 30 thousand people the future steel factories can employ about 10 times the number. So an additional 4 to 5 lacs people can be employed in future steel industries and their subsidiary businesses in India with decent income.

CHAPTER X.

Motor Car Industry in India.

The history of Motor Car begins from the year 1892—when in France the 'first Motor Car was manufactured. In the beginning, the motor car was not allowed to run more than 4 miles an hour and one attendant with flag in hand, had to run on the foot path all the way before the car. French cars are still the best type of car in the market. In the beginning motor car was considered a luxury but as in case of use of other materials what is considered a luxury to-day becomes a necessity to-morrow—so is motor car to-day. Motor Car is a necessity in the present day social life. As the motor cars came more in use, every advanced country tried to manufacture the cars and since 1892 uptil the present day though the use of motor car in India is daily increasing none has thought the possibility of motor car manufacture in India.

There is a distinct advantage for India to launch motor car factory as there is heavy import duty of 37 per cent on the foreign cars—excepting 7 preference in case of the British cars as per Ottawa agreement. So if motor car can be manufactured

Early history of
motor car
manufacture.

Motor car manu-
facture in India
—the facilities.

in India it will get preferential treatment of 37 per cent. The ingredient for motor car manufacture—the iron steel forgings, and the labour will be cheaper in India than in any other motor manufacturing country. The minimum pay of Ford's Factory is 6 dollars a day of eight hours work. So any unskilled labour in Ford's motor factory earns about Rs. 475 a month (calculating dollar at Rs. 3-2-0 and 25 working days a month). The skilled labour gets higher pay. There are about one lac and ten thousand skilled and unskilled workers in Ford's motor car factory. And considering the average pay of the workers at Rs. 500 a month, Ford's factory pays about Rs. 66 crores a year by way of pay to the workers. In spite of all these expenses Ford sells his car at 339 to 500 dollar i.e. about 1019 Rs. to Rs. 1500 at a profit. The post of a deputy magistrateship is a high ambition of Indian graduates. An unskilled worker who gets admission to-day in Ford's factory earns in a month as much as an Indian Deputy Magistrate of 10 or 12 years standing. We have seen in the ship building industry that the pay of workers (skilled semi-skilled and unskilled) is quite decent one. What we want to impress on the public is the fact that India can solve its middle class unemployment equally as the other nations of the

world have done, by launching upon big industries. We are spending our whole energies in political and communal questions with dubious result, while if the activities of the whole nation are concentrated towards the Industrial and agricultural regeneration on a modern and up to date method, the workers as well as the country will be much benefited by them. A nation who in spite of all the vast resources of his country can be blind to this fundamental fact cannot but be a most backward nation. It may have high philosophy, literatures and arts, it may have industries in the old days but the present generations are but the unworthy descendants of the ancient civilized race. In the ancient period, the Indians took initiative in every sphere of industries such as, ship building, iron melting, muslin, cotton and silk goods manufacturing. Now a days no initiative is required but only, to see with eyes open and to do what other nations are doing in the field of industries.

Capital of Motor Car Industry.

Now a days when we talk of motor car manufacture in India, our enthusiasm is chilled at the idea of huge investment made by the foreign

Smallness of
capital of
Fords Factory.

companies for motor car manufacture. But Mr. Ford, now the greatest motor car manufacturing magnet of the world has proved the possibility of starting motor car manufacturing with a very small capital, i.e. less than one lac of rupees. On the 16th June, 1903 Ford, started his Ford Motor Company with a subscribed capital of 1,00,000 dollars but the paid up capital was only 28,000 dollars i.e. about Rs. 85,000. With this small capital Ford built up his motor car factory which is now the biggest motor car factory in the world. The present output is over 20 lacs cars a year. Mr. Ford is now considered as the richest man in the world. It is interesting to note the gradual development of his factory.

Year.	Number of cars produced.	
In 1903	..	195 Cars
„ 1903	..	1513 „
„ 1904—5	..	1695 „
„ 1913—14	..	264972 „
„ 1918	..	700000 „
„ 1923	..	2090959 ..

So till 1919 Ford with the small paid-up capital and with the profit of his business developed his business and in 1918 his factory produced

over 7 lac cars. On the 9th July in 1919 Ford Motor Company was re-organised under the laws of Delaware for an authorised capital of 10 crores dollars. The Company was chartered to build automobiles, Trucks, Tractors, Air craft, Inter combustion engine, Ships, Locomotives and all allied products.

To-day the form of Ford organisation represents a complete industrialisation in which every link is strong. Raw materials, transportation and manufacturing are entirely under the Company's control. The Ford Industries are independent of strikes, price fluctuations, or shortage of raw materials such as coal, iron and timber and every stage of transportation from mines and the forest to the finished production is regulated. The mining of iron ores are done by Ford employees, the cutting of timber in the forest are done by Ford men. The transportation of the raw materials are done by motor ships belonging to the Ford Company. The workers who are connected with the Ford's concerns do not get less than 6 dollars a day for each unskilled man. The semi-skilled and skilled men get better wages. Their appointment is permanent. So there is no strike in Ford's concern.

Why Ford's
Factory is
strike-proof.

Ford's River Rounge Plant.

The raw materials are brought mostly by Ford's motor ships to the River Rounge Plant. Here there are blast furnace to manufacture from iron ores, pig iron and steel. As soon as iron and steel are produced in their hot state they are taken for necessary forgings—radiater, gear, spikes—in their 54 departments. Each department can produce more than the combined production of the same parts of motor machinery in the whole world. River Rounge Plant produces every day 500 to 600 tons of iron and steel motor car machinery parts to supply Ford's High-land-park for assembly.

Ford's High Land Park.

High-land-park may be called the cradle of Ford's Industries. While the River Rounge Plant deals primarily in raw materials, High-land-park may be likened to gigantic machine shop. It makes 13 of the major assembly of Ford's Car and Truck besides turning out thousands of Tractor parts for the River Rounge Plant. 240 car loads of raw materials enter the High Land Park Factory in 12 hours and 260 cars of finished parts leave it in the same period.

Besides assembling parts for finished motor cars, High Land Park possesses a gigantic power plant, which is always a hobby of Mr. Ford. How expeditiously and with clock-like regularity, the whole process of motor manufacturing is done in Ford's Factory can be gauged from the following facts—

From the time of delivery of iron ores to the River Rounge Plant, to the finishing of cars in High Land Park, for road use—it takes only 33 hours. So iron ores which were for centuries lying idle are converted through certain processes to finished motor cars within 33 hours and become not only active and living force in human society as if by magic wand but are sources of a great national wealth for United States of America. This is the service of Ford's Motor Factory not only to United States but to the world at large. Ford's ambition is to make his car so cheap that most of the families can buy and use it. So we find to-day that a very good number of his factory workers have purchased his car on weekly payment system and that in America over 2 crores of motor cars are in use i.e. at the rate of one man in every five men in America is a motor car owner.

Mr. Ford provides for his workers, amongst

whom can be counted a good number of cripple, every sort of amneties that is humanly possible.

Motor Car Factory in India.

If motor car factory is to be started in India where the purchasing power of the people is greatly reduced—the plant of Ford and the process of Ford manufacturing must be adopted. Ford's method will cheapen the car like anything to suit the pocket of the Indians. Even on payment of more than Rs. 18 a day to the ordinary labourer Ford can sell his car between 339 to 500 dollars equal to Rs. 1017 to Rs. 1500. The price of the raw materials such as iron ore, coal, timber, etc. will be equal if not cheaper, than in Ford's factory and if the ordinary workers in India be paid Rs. 4-8 a day i.e. one fourth of what is paid in Ford's Factory—they will be a satisfied class of workers. So it can be expected that the car that can be produced in India will be cheaper than the selling price of Ford's car in America and as the Ford's car has got a demand throughout the world for its durability and cheapness—so the Indian motor car can command good sale in the world market.

In the Five Year Plan, the Soviet Russia purchased the whole Ford's motor plant and 70,000 parts of cars at £60,00,000 which is always considered in the world as the most intelligent contract ever made by the Soviet Russia under her Five Year Plan.

At a price of 70,000 motor car parts the Soviet Russia is getting the advantage of patent right, the services of engineers to fit up the motor car factory as well as training up the Russians in motor manufacture in Russia and in Dearborn factory of Mr. Ford.

Location of Motor Car Factory.

We think if, in the beginning, motor car factory is started near about Tata's steel factory,—Tata supplying the requirements of iron and steel, the forgings of which can be made in the motor car factory, assembly of parts being made in another branch of the factory, quite in imitation of Ford's factory, India can start immediately the motor car manufacturing business. And as the Tata's iron and steel products are produced at a higher cost than most of the foreign and continental steel, to stand in competition of which Import Tariff duty at the rate of Rs. 21 to 73 per ton

is imposed so in course of time it will be necessary to open blast furnace for production of iron and steel for the use of its car manufacturing. In the beginning Tata may be asked to furnish iron and steel at a price in which foreign steel are available in the Indian ports without duty. If Tatas are not agreeable to that or if Tatas cannot produce the quality of steel and iron required for motor manufacturing, then the best course open is to import foreign steel on which no duty should be imposed. Every country is giving some sort of bounties for its principal Industries, such as ship building and shipping trade and even in some countries bounties were given by the Government for motor car manufacturing. In the above case an abolition of Tarrif duty will be felt a necessity. Next to iron and steel is timber. Mourbhanj State and adjoining places possess rich timber forests which will also be near at hand if the factory is started near about Tata's factory. If Ford's patent right is purchased, arrangement can be made in such way that the Ford engineer will in the first few years train up the Indian young men in the art of motor car manufacture and if necessary Ford's factory in America can train up some young men in the line.

Capital.

We think in the beginning a paid up capital of Rs. 5 crore will serve the purpose and after sometimes when blast furnace are to be opened for production of iron and steel, fresh capital will be required. The capital should be raised by Government guarantee of minimum interest under Development Trust. And as more motor cars will be in demand, factories can be opened in places where there will be possibility of running steel factory on a profit. It should not be forgotten that to make motor cars cheaper in the market—command of raw materials at a cheaper rate is a necessity. India's demand in good year is about 4 crores worth of motor cars and taking Rs. 2,000 as the import price of the cars—India on an average consumes 20,000 motor cars. But if the cars can be manufactured within 1000 as the selling price—the demand of cars will be at least double the present use, so India will require on an average of 40,000 to 50,000 cars. Ford's plant in Canada alone manufactures 1 lac to 1 lac 50 thousand cars in a year. With the increase of purchasing power of the Indians through Industrial Development, it will not be calculated on wrong side if the yearly consumption and use of new motor cars comes to one lac in India. And if

the motor cars are produced at a competitive price there will be more demand of Indian motor cars in the world market. If on the pattern of Ford's factory blast furnace for production of iron and steel will be necessary, it may be so arranged that all the iron and steel forgings can be done in one factory and the parts of motor cars can be transferred to several factories in India for assemblage.

**Workers that can be Employed in Motor Car and
Subsidiary Industries.**

If India can manufacture at least one Lac motor cars and Tractors a year—it can find employment to about 30,000 to 50,000 educated young men in motor car and its subsidiary industries.

Constitution of Motor Car Industry.

These factories can be started under Development Trust under the Ten Years Plan and can be in charge of foreign expert as Commissioner with decent pay assisted by Board of Directors formed from the business men and when motor industries will grow—men with knowledge of motor car industries can be taken in. It will be the duty of the Commissioner not only to instruct and supervise the motor factories but to investigate the possibility of Indian motor industries in the

home and foreign markets. On an average pay of Rs. $4\frac{1}{2}$ a day i.e. less than one fourth at which Ford employs his unskilled labour and a bonus on the profit of the Company—the Company can earn sufficient profit to pay 4 per cent guaranteed interest, create capital redemption 'fund which can pay off the capital within 15 years' time and pay additional 1 to 2 per cent, to the investors as well as decent bonus to the workers.

CHAPTER XI.

BIG MACHINERY INDUSTRIES IN INDIA.

There are about 8134 factories in India which come under the Indian Factories Act.

India's requirement of big machinery will increase to about 60 crores a year.

• These factories use generally foreign machinery driven by electricity through motor, oil, or steam engines. All these motors, oil engines and steam engines are foreign make.

Besides the above there are locomotives which are foreign. None of these are Indian make. India imports on an average of Rs. 17 crores in machinery and mill works besides the railway locomotives and other railway materials. If these can be produced in India a good number of unemployed can find employment in the Industries. Besides the above any plan of complete industrialisation of India will necessitate employment of machineries in a bigger quantity. Thus new jute mills of Bengal to convert about 44 lacs of bales of raw jute, conversion of at least Rs. 80 crores of raw cotton and cotton waste (out of the export of Rs. 96 crores in good year), the starting of motor car factories, opening of ship building, paper mills, soap factories, sugar mills and different other mills will require at least 3 to 4 times of the present import of the heavy

machineries. If for the first two years the requisite quantities of the machineries are imported with the idea of making India self-sufficient for its own machineries—India can early consume about 50 to 60 crores of the big machineries inclusive of its present demand of 17 crores.

The manufacture of these machineries and engines will require opening up fresh iron and steel factories for forgings and for other purposes. If the machinery manufacturing industries are opened along with blast furnace to produce iron and steel from iron ores—then it will be much cheaper than the foreign products as the raw materials and labour will be cheaper in India than in any other places where these are manufactured. Besides the above tractors and other agricultural implements can be produced from these factories. As there will be hundred and one kind of machinery of different description—each class of machinery will require separate branch factory for their production with one big steel factory—the mother of basic materials, the requirement of iron and steel of different classes of machinery for its iron and steel parts can be supplied by the steel factory. The raw materials being cheap—the machinery will be cheaper.

CHAPTER XII.

COTTON MILL INDUSTRY IN INDIA.

Cottage Industries—vs.—Mill Industries.

India is at present on the horns of a dilemma to decide which is the best course to follow cottage industries or mill industries specially in the domain of textile trade—such as cotton, silk, woollen and Jute mills of Bengal have ruined and given a decent burial to the jute yarn and gunney made in Bengal as a cottage industry. And as there is no movement to resuscitate jute, silk and woollen as a cottage industry except the cotton, so we shall see how far cotton industry can be developed on the basis of cottage industry. The importance of cotton industry is realised in every tropical country as it forms the next item of necessities of a man after his food—just as woollen industry is considered in cold countries. The importance of cotton industry in India is simply stupendous as the clothing of 35 crores human beings is a very big problem. India till the invention of power looms in England, supplied all her needs out of handloom cloth—spinning was done through Charka or Takli. India produced higher counts thread and made muslin out of them. Indian

piece goods and muslin were in good demand in the foreign markets. It is a matter of history how English people by legislation stopped the use of finer counts Indian piece goods in England. On the introduction of power looms mass production was made. The piece goods were cheaper and India began to consume more and more of the English piece goods. The weaver class in India though hit hard went on with their business mostly with the help of imported yarns, as yarns made from Charka or Takli could not stand in competition with the foreign yarn. The higher counts foreign yarns were specially used by the weaver class.

Cotton Mills in India.

The protective tariff under Cotton Yarn Act gave impetus to Cotton Mill Industry in India. The number of mills started in India upto 1931 is 340 consisting of 95 lacs spindles and one lac 86 thousand looms and the production of Indian mills is 2990 million yards of cloth of all classes grey, bleached and coloured as against 776 million yards of Foreign import. Besides the above piece-goods Indian mills produced 966 million lbs of twist and yarn in 1931-32. The number of men employed in the present cotton mills is 3 lacs

80 thousand men. The consumption of raw cotton by the cotton mills in India is 25 million bales of 400 lb each.

Hand Looms in India.

It has been estimated by the experts that there are 50 lacs spindles and 20 lacs hand looms working intermittently in India which give livelihood to about 80 lacs people and produce piece goods about 25 per cent of the total production of the Indian cotton mills. As there is no other data, we have to be satisfied with the above report. As the spinning and weaving through hand-made processes are not done regularly so the productions are limited and as the whole family contributes to the production so the number is so high. So it stands that if the hand looms industries can be developed in India, it can find employment to a very large number of people. If 80 lacs people can produce one fourth of cotton goods as produced by about 4 lacs people engaged in cotton mills, to produce the whole output of the Indian cotton mills 3 crores and 20 lacs people can be employed in home industries. Secondly as the import of foreign piece goods in 1931-32 is about Rs. 10 crores on the foreign import of 776 million yards i.e. about one fourth of the Indian

mill production, another 75 lacs to 80 lacs people can be employed in cottage industries. So to meet India's demand of piece goods about 4 crores workers can find employment. This idea struck Mahatma Gandhi and he propounded his khaddar and anti-mill theory.

Etiology of Khaddar Movement.

The above fact (though it refers to the figure of 1931-32 still the prospect of employment of several millions people in Khaddar manufacture was held for, in 1921 when the movement was started) as well as the theory of Karl Marx, the chief priest of socialism that all machineries are the devilish inventions of the capitalist concerns as they are labour displacing and the best proof of his theory that Karl Marx finds, is the ousting of weaver classes by the introduction of power looms possessed the minds of the Indian Leaders; and the Congress advocated the khaddar movement along with the non-co-operation movement. The big personality of Mahatma Gandhi carried away all oppositions to such movement; young and old, male and female, rich and poor belonging to middle class started Charka for spinning cotton

Congress adopted Karl Marx's Anti-mill theory.

yarn and some produced khaddar through hand looms. As khaddar in the beginning was an anti-mill propaganda, so the use of cloth produced from the Indian mill was tabooed. The labourer and agriculturist classes were not very enthusiastic in the movement—however keen they were for a darsan (sight) of Mahatma Gandhi and with a very few exception, kept themselves aloof from the khaddar movement. The middle class gave a trial fit and as they found it not remunerative they gave it up. And if an all India census is taken of those who started with Charka and gave it up—we can scarcely find one amongst ten thousand or a lac amateur who still continues the Charka. Had this movement been adopted by the labourer and agriculturist classes who have got leisure and period of unemployment the khaddar movement would not have died so early. Though we find people wearing khaddar, most of them wears mill made khaddar and a very few uses hand made khaddar. Even to some leaders of non-co-operation movement, Khaddar is a *meeting-ka-kapra*, i.e. cloth used during meeting or social gathering only. It is estimated that the present output of pure khaddar from hand looms is 10 million yards whereas the cloth produced from Indian cotton mills are 2990 million yards in 1931-32, from 340

mills i.e. about 9 mills can produce the whole output of 10 millions yards of khaddar.

So the khaddar movement could not make a headway inspite of the interest and support of the middle class of India in the beginning as it proved to be unremunerative and the milk and honey the movement promised were not forthcoming.

When the movement was on its wane to convince its adherents that everybody had some leisure hours which could be best utilised towards the individual attempt at production of khaddar for the use of their family to make India self sufficient as regards piece goods. This gave a fresh impetus to the khaddar movement and many devoted their spare times in Charka and Khaddar. But this did not carry the movement further as the middle class who were attracted to this movement found out two defects :—

Second attempt
at Khaddar
manufacture.

(1) If whole time is devoted to Charka and Khaddar, the remuneration of their labour was very small and unattractive i. e. Re. 1-14 to Rs. 2 per month.

(2) If the spare time is devoted towards it, they do not get the money value of their time.

The working man in a middle class family spends his spare time either looking after house-

hold affairs—teaching their children or in the shopping or reading or writing books, newspaper or in amusement or in the works of arts, music and painting etc. They considered that their spare time was more usefully spent in the above ways than in spinning in charka and weaving khaddar.

Economics and Ethics of Khaddar Movement.

The khaddar and anti-mill theory suffered from the following initial defects :—

1. The Congress borrowed the exploded theory of Karl Marx—the chief priest of socialism—We have shewn in the Chapter IV that the facts are otherwise. The improved machineries are employing more labour not only in other industries but in cotton industries also. The Congress who fought against “slave mentality” is accused of slavish imitation of an exploded theory without going through the pros and cons of the whole matter. In the hey day of khaddar and anti-mill movement, India imported more of the foreign piece goods and exported more of her raw cotton and cotton waste. The following is the figure of import of foreign piece goods and yarn the fall in import in last two years is due to increase of power looms through Cotton Tariff Act.

Khaddar movement encouraged foreign imports.

Import in crores of rupees.

1921—22	.. 56·94	1926—27	.. 65·05
1922—23	.. 70·13	1927—28	.. 65·16
1923—24	.. 67·48	1928—29	.. 63·24
1924—25	.. 82·33	1929—30	.. 59·49
1925—26	.. 65·67	1930—31	.. 25·25
	1931—32.	.. 19·15	

In 1925-26—India exported raw cotton and cotton waste to the value of Rs. 96 crores. If up-to-date machineries would have been instated to convert the cotton into piece goods, India could not only stopped all the foreign imports but could supply the outside markets with her own piece goods. The nation, such as, Japan who purchases the raw cotton from India, supplies the piece goods not only to India but to China and other foreign markets. No nation on the face of the earth can be converted to the khaddar idea of the Indian National Congress and can be induced to buy the Indian khaddar. To command an export trade in the Indian piece goods, India must turn out piece goods suitable for the use of those countries at a competitive price, which is only possible if that is done through machinery. Khaddar cannot compete with machine made piece goods of England and Japan in the Chinese, African and Persian markets. So the khaddar and anti-mill theory of the Congress has not only encouraged more importation of the foreign piece goods but aims at the ruin of a valuable export trade of India.

Now look at the other side of the picture, how by increasing the power looms and spindles, India has been able to reduce the foreign importation of piece goods.

Increase of
power looms
checked foreign
imports.

	No. of Mills.	Spindles.	Looms.	Mill production.	Imports in million yards
1926	334	8714000	159000	1954	1564
1928	335	8704000	166532	2259	1788
1929	344	8807064	174992	2357	1973
1930	348	9124768	179000	1893	1937
1931*		9500000	186000	2419	1919
1932				2561	890
1932-33				2990	776

So we find from the above facts that inspite of preferential treatment as per Ottawa agreement to the English piece goods and inspite of the fall of the value of yen in exchange of rupee almost by half the importation of foreign piece goods which stood more than the cent per cent of the Indian mill production in the year 1928—29 came down to about 25 per cent in the year 1931—32 through increase of power looms under the protective tariff of cotton yarns Acts. These are the stern facts in favour of the increase of mill industry and you cannot meet them by mere camouflage.

2. The anti-mill theory of the Congress would have killed Indian cotton mill Industry where more than 4 lacs people are employed and where the investment of Indian capital is about Rs. 40 crores besides reserve fund of another Rs. 30 crores.
- The Anti mill theory—if it would have been successful would have ruined 70 crores capital and 4 lacs of Indian workmen.

3. It is a fact of history how India lost her cotton, silk, shipping and iron industries through following the old and crude methods. As soon as power looms and steam power were invented in England other advanced countries adopted the invention, while India did not. So they lost all their industries and had to depend on foreign piece goods, foreign ships and foreign steel. India was just making a headway in cotton mill and steel industry when the Congress propaganda began. It possessed the minds of the educated classes and any talk of mill industry in India was nauseating to them. Otherwise when money was cheap in the year 1921 and when cotton mill industries and other industries were making good profit, there would have been hundred and one mill industries of different kinds to the credit of India. The
- India would have been blessed with hundred and one cotton mills but for the anti-mill propaganda of the Congress.

importation of foreign piece goods would have been stopped by this time and India would have been in a position by this time to think of increasing its export trade in foreign markets.

Sir Surendranath, whose contribution and service to the cause of the country was not less important than any of the leaders of the country, chalked out the right path for the nation. In the Swadeshi days, Sir Surendranath and his colleagues saw that to fight against the imports of foreign piece goods we must have equally good machineries as are used by the foreigners. The same common sense view was taken by Soviet Russia in her Five Year Plan. Soviet Russia is out and out disciples of Karl Marx but they have discarded his anti-mill theory and payment by piece work to the labourers. They saw that to 'overtake' and outstrip the capitalist concerns they must introduce the up-to-date machineries and adopt their method so that Soviet Russia can compete with the capitalist nations of the world. In these days to preach *khaddar* and anti-mill theory is really extraordinary.

Up-to-date
machineries as
advocated by
Sir Surendra
Nath during
Boycott move-
ment and Soviet
Russia under
Five Year Plan.

4. When after trial the middle class found the new theory of crisis as preached by congress leaders. that the *khaddar* movement was not bringing the milk and honey it promised, the propagandists preached a new theory of 'crisis' which have made its appearance amongst the machinery using nations such as America, England, France, Germany etc. The preachers of this new cult admit that there is no doubt wealth amongst the nations using up-to-date machinery, but that they are awfully bad. They are passing through a crisis so to say. The unemployment in those countries are increasing. This is the new theory of 'crisis' as preached by some of the leaders of our country.

Now let us see what the facts are :—

(a) Unemployment of the advanced countries—
 Unemployment in India is thousand times more than machine using countries. the figure of unemployment in machine-using countries are thousand times less than in India. If they have sometimes few lacs unemployed—India has few crores unemployed, whose number is as countless as stars in the heaven.

Secondly—The unemployment of those countries are met by doles and other reliefs afforded by the Government of their country. In England alone the unemployment doles given yearly by the English Government out of its revenue is about Rs. 60 crores. Whereas in India unemployed are not allowed to be starved. The doles Government of machine using countries can pay doles or reliefs to the unemployed but the poor income of India Government does not allow that.

and the reliefs that the Government of the advanced countries spend towards their unemployment are charges on the revenue of the respective countries. The Government gets enough revenue principally due to the growth of industries of their own country which they can spend towards the relief of unemployed in their country. America's yearly revenue is about Rs. 1200 crores England's revenue is about Rs. 1100 to 1200 crores whereas the revenue of the Central Government of India is 124 crores only, scarcely sufficient to meet the cost of administration of the country.

(b) Education of the people of machine-using country. Again if we compare the expenses of the advanced countries towards the education of the people of those countries and the increased percentage of literacy to the small amount spent on education in India and the small percentage of literacy in India the new theory of crisis falls to the ground. The literacy of some of the advanced countries is over 90 per cent., while in India it is only 7 per cent ; because the income of India Government is too poor to make any decent expense over education.

Education of
the people.

(c) Sanitation of the machine-using countries—

Sanitation of the country. Similar argument can be advanced in case of sanitation of the advanced countries as compared to the insanitary conditions in India. Malaria is a preventable disease. It takes a yearly toll of some lacs people specially from Bengal and some other parts. If sufficient money could be spent Malaria could have been eradicated as in Italy, Panama and other parts of the world. But where is the fund of the Government to make a huge expenses of several crores for complete wiping out of Malaria ?

(d) Average income and standard of living

Standard of living in India is too low. of the people of the machine-using countries as compared to low income and low standard of living of the Indian people is another argument against the new theory of 'Crisis.'

The fact is that the Government of all the machine-using advanced countries gets a sufficient revenue to spend in the Nation building departments as well as to meet expenses on account of any unemployment—whereas the income of India Government is only Rs. 124 crores from the population of 35 crores i.e. at the rate of Rs. 3-7

per head but in England it is Rupees 200 per head and in America it is little over Rs. 100 per head. So the Government cannot spend any big amount towards the education, sanitation, agriculture and other nation-building department. It is only by complete industrialisation of the country through up-to-date machinery that we can enable the Central Government to have decent revenue which can be spent towards the Nation-building departments.

But one argument in favour of cottage industry as against mill industry appears to be sound if we look superficially in the matter. The theory is mill industry kills home life, encourages vices and often proves unhealthy. So the cottage industry is the best form of developing the industries of the country specially the textile industry.

Let us see how far the argument is correct :—

First—In any industrial product we come in world competition. If the quality of the product is as good and durable as the home mill or foreign mill products and if the price is such that we can stand in competition with them—and if this is possible through cottage industry—undoubtedly every one will be follower of the cottage industry. But if the quality of the products of the cottage

industry is not as good as the indigenous mill or foreign mill products and at the same time the price is higher—still people may prefer the products of cottage industry but at a sacrifice. But in many cases it is found that the general run of people, specially those whose income is limited and at the same time has got a big family to maintain, can not afford to pay higher prices for the very preliminary necessities of life such as cloth. It is not because his patriotic sentiment is less but because he cannot afford to do so. This being the case with majority of the people in India with their low purchasing power, *khaddar* as product of the cottage industry, could not create a demand amongst the labourer and agriculturist classes and amongst the people in middle class with low income; the above classes form the bulk of the Indian society. So the alternative lies for cheap production of the mill. Those cottage industries for which no machinery has been invented are still progressing. Where cottage industry is not remunerative and where people can find employment in mills—they prefer works in the mill—though in some stray cases it ruins the family life but it saves the family from starvation.

As to the charge of mill industry encouraging vices—there are vices among men without being

engaged in mill industry. The present labour of the mill industry being recruited from the lower strata of the society it is not impossible that they may be addicted to vicious life. But if all the workers are recruited from the educated class, vices will be few and far between.

The third charge of mill industry as to unhealthy atmosphere—It is not a fact that there is plenty of wealth and health amongst those who live at home or who are engaged in cottage industries. But the fact is otherwise ; if a statistics of health are taken of those who are engaged in cottage industry and those who are engaged in mill industry—it will be found that those who are engaged in mill industries have got better health than those who are engaged in cottage industries. There are about 15 lacs people engaged in mill industries in India—so it is easy to get the figure of health amongst the workers. But where to get the health statistics of those who are engaged in cottage industries ?

The Possibility of Running Mill Industry as Cottage Industry.

If cottage industry is run as an adjunct to mill industry—there is a possibility of running cottage industry at a profit. By cottage industry

we do not mean the crude method but up-to-date machinery should be employed for such cottage industry. We want to confine our observation to the textile industries—such as jute, cotton, silk and woollen industries. Now let us take a concrete case of a jute mill or cotton mill. Supposing a jute mill of 500 looms is started in some jute centres in the moffasil. Usually the spindles that are employed is about 20 times the number of the looms. If electric power is used—it can be so arranged that the power plant will be sufficient not only to supply power to the mill but to the adjacent villages to run the looms. And the number of spindles and other adjuncts must be sufficient not only to produce yarn for the looms of the mill but also to supply for the looms in adjacent villages. If looms be set up in adjacent villages near about the mill and if the looms are supplied with electricity and materials from the mill, simply for weaving purpose, then the mill industry may develop as cottage industry in villages. The cost of transport of finished goods from village to mill either through cart or boat will be one way only as delivery of materials for weaving only from mill, can be taken during the delivery of finished product to mill. We think an experiment in this way may be successful. The

Author has the opportunity of meeting some European Jute Mill Managers, and one Scotchman who was a Director of Jute Machinery Company in Scotland happens to be in the meeting. The sense of the meeting was that an experiment can be made in this way and if it succeeds—which they hope it will be—it will create revolution in jute and other textile industries not only in India but in other parts of the world. Similar method can be experimented in cotton industry. The only point to be considered in cotton industry is that at present in order to enable the mill to use finer yarn of higher counts an artificial cooling atmosphere is created in the cotton mill—but this is not possible if the same is done at home. But this is possible in winter season when no cooling is required, and in hot season, of course the new cottage industry can weave only the lower counts.

If an experiment is successful in this way we may engage a good number of female workers in this line, and this method may create a revolution in the textile industries.

India's Need of its Textile Goods.

The prewar consumption of piece goods per head was 12 yards. The production of Indian mill is about 2990 million yards in 1931-32,

production of *khaddar* is about 10 million yards. Production of handloom partly by imported yarn and partly by Indian mill yarn is about 700 to 800 million yards and the foreign import is about 776 million yards. So we can take that the prewar average consumption of 12 yards per head of 35 crores of people has again reached in 1931-32. But it is known to all how Indian population is ill-clad. If the purchasing power of the Indian people is raised through extensive industrialisation of the country and though higher price of her agricultural produce the average consumption of Indian people per head will not be less 20 yards which means that India must have textile goods to the extent of at least 7000 million yards instead of 4400 million yards of 1931-32. The production of the Indian mill i.e. 2990 million yards should be increased by at least two times which means that the number of spindles and looms must be double as that of 1931-32.

If the new cotton mills are started on cottage industry basis and if the trial is successful the new mills consisting of say 1 crore spindles and 2 lacs looms can employ about another 4 lacs youngmen or women of middle class in mills and at home.

The vast product of raw cotton of India consisting of 4,064,000 bales in 1931-32 as against 4,820,000 bales in 1930-31, and the cotton waste can be fully converted into finished goods by the introduction of at least double the number of spindles as well as the looms. In 1930-31 the

consumption of raw cotton in the Indian mills was 2,269,359 bales as against 2,345,075 in 1931-32. It shows that the Indian mill consumption of raw cotton was less than 50 p.c. in 1930-31 and little more than 50 p.c. in 1931-32. Besides this for yarn of finer counts sometimes Egyptian cotton and some foreign cotton is imported. So we find that if the standard of production of raw cotton for the year 1930-31 is maintained India with the increased purchasing power, can consume the whole raw cotton for its use. But if the purchasing power does not increase appreciably then India can export to other foreign countries its mill-made product. Let us see how the export trade of cotton manufacture of India has suffered through Japanese, English and other foreign competition in the foreign markets :—

Export of Indian Cotton Yarn and Manufacture.

Exports in Lacs of rupees.		
1923-24 ..	..	10.95
1924-25 ..	..	11.27
1925-26 ..	..	9.65
1926-27 ..	..	10.75
1927-28 ..	..	8.67
1928-29 ..	..	7.80
1929-30 ..	..	7.10
1930-31 ..	..	5.22
1931-32 ..	..	4.82

So from 11 crores 27 lacs of export in 1924-25 the value has fallen down to 4 crores 82 lacs in 1931-32. To increase the export trade of the Indian textile manufactures—India must have her own mercantile marine and as per the recommendation of the world economic conference, there should be one international standard of exchange—as the fluctuation of the value of Yen and other foreign currency affects sometimes adversely the Indian trade.

Capital.

To convert the balance of 50 p.c. production of raw cotton and cotton waste India would be requiring at least 40 crores of rupees capital which can be raised under Development Trust under Ten Year Plan on 4 p.c. Government guarantee. The same conditions as recommended in other industries may be adopted here.

The Constitution of Cotton Industries.

Just as in jute there is one Commissioner at the head of all the proposed new jute mills in Bengal; so there will be one Commissioner in India for the proposed new cotton mills. As there will be no dearth of qualified expert Indians, the post may be filled up by Indian on a decent pay.

CHAPTER XIII.

ROMANCE OF INSURANCE.

Antonio would have heaved a sigh of great relief while his ships were in the high seas in the glorious days of Venice had the modern method of covering the risk of cargo and ships been known to them. So many an Antonio passed a dreamless and sleepless night. The inauguration or rather the invention of Marine, Fire, Accident and Life Insurance have not only saved from ruin the mercantile community and in case of a Life Insurance, the family from starvation, but its social service in the accumulations and preservations of huge funds have not attracted the public notice it deserves. The potentialities of Insurance Companies were never brought home unless their assets accumulated to 7 figures. Like Alauddin's lamp one life Insurance Company has brought to the public notice the assets which amounts to about Rs. 300 crores. Again one Accident Insurance Company is credited with Rs. 11 crores yearly revenue *i.e.* equal to revenue which the Bengal Government with all its paraphernalia of civilians and high officials yearly collects from 4½ crores of Bengalees.

* This article was contributed by the author in the Special Edition of "the Advance" in 1930.

Another Accident Company's yearly revenue comes to about Rs. 10 crores, and every year the figure increases. In America the huge Life Insurance premiums of Rs. 30,000 crores of policies that are in force as well as Fire, Marine and Accident premiums make it possible for their Banks to finance trade and commerce to any extent possible.

“ Oriental ” was started with a capital of one lac and fifty thousand, fifty-six years ago, at a period when at least fifty big Zemindars in Bengal could contribute the above sum individually. To-day the assets of Oriental comes to about Rs. 9 crores and if the interest earning capacities of the assets of the Insurance Company is computed at $5\frac{1}{2}$ to $5\frac{3}{4}$ p.c. and if Oriental had invested its funds in liquidating the present indebtedness of the big Zemindars of Bengal, the interest earning capacities of its funds would not have been impaired making it the saviour of the Bengal Zemindars. These are the potentialities of Insurance Companies. Like Rip Van Winkle we rise from a long sleep and find that Insurance Companies can accumulate staggering sums and can be one of the most potent factors in the commercial regeneration of the Country.

Potentialities of Insurance Companies.

It is a very happy sign of the times that we are more realising the stupendous potentialities of Insurance Companies as will be evidenced by floatation of a good number of new Insurance Companies all over India. But most of these Companies are meant to carry on the Life business ; and there is a paucity of General Assurance Companies such as Fire, Marine, Accident, Fidelity, etc. If we look into the early history of Accident Insurance Companies in England we will find that over a century ago some of the biggest Accident Companies were started in England. In the early period though some of the Companies did not fare well—the survivors as well as those which were started after 1860 were doing substantial amount of business every year. At present there are over 150 Insurance Companies that are doing Accident business in England ; and the premium income of the majority of the Companies are very decent. In 1928 " Commercial Union " secured a premium-income of about Rs. 11 crores. " General Accident " earned about ten crores while " Ocean Accident " earned about 9 crores of rupees in 1923. And the above incomes exclude the huge income of the Fire department. It is a very poor record

that in the sub-continent of India we have got only 4 or 5 Companies that are under-writing accident risk. If England requires over 150 Insurance Companies to carry on its accident risk India would in near future require not less than that and in order to make India self-sufficient in Insurance matters India should launch in some good Insurance Companies to carry on its Accident risk. Lately there are some activities regarding the floatation of Life Companies and there about 40 companies that have been started within a very short time. We wish them all "Bon Voyage," and expect that the day is approaching when India will not have to depend upon foreign Companies to under-write its accident risk."

The Basic Principles of Insurance World.

On the invention of electricity the scientists of the advanced countries were not satisfied with using the electricity in fans and lights but they went further and their researches resulted in use of electricity in all the sphere of human activities where heat-power are necessary. So we see now-a-days the poor electricity has been engaged in driving the Trams, the Railways, the Factories, in Broadcasting, cooking, heating and in hundred other things of household utility.

The Insurance has been started some 200 years ago, but besides covering the risk of life, fire, marine and accident, Insurance has made a great headway in other classes.

The basic laws that guide the Insurance world is to find out the rock of average loss in any Insurance field on which to build the huge fabric of Insurance. Thus the H. M. or O. M. mortality tables are adopted in calculating Life Insurance premia tables. Beside this there are calculation of compound interest like sands and mortars as well as expense ratio. In fire, marine and accident the premia tables are made on average loss and expense ratio basis ; the calculation of compound interest is generally absent. Now these are the fundamental principles and we may say foundation rocks on which the whole Insurance structure is constructed. The huge insurance fabrics being founded on these solid rocks are weathering all storms and stresses of circumstances for generation to generation. The theory of old age with all the attendant loss of energy and decrepitude is not applicable in the domain of Insurance where the Company who is more old possesses more vitality and more potential power in the social structure.

Again in the factories the machineries are more worn out the more they are in use but the Insurance Companies gather more strength and virility the more the companies are in existence. Like mythical Devas (gods) the general run of Insurance Companies are immortal. And instances are few and far between where Insurance Company is wound up; in majority of cases, they are amalgamated with other Insurance Company, when it is not pulling on well.

These being the facts, Insurance has not progressed in India beyond certain specific lines chalked out century ago.

**The seed of Mortality of Banks,
Factories and Other Businesses.**

Generally we find the following main causes of failures of Bank, Factories or other business concerns. Let us see how far these affect the Insurance Companies—

(a) Under capitalisation—Generally we find that a very potent cause of failure of any business concern is want of requisite capital. But Insurance Companies are not much affected by want of capital. The reason lies in the fact that the premium-income serves as a capital. So we find

with a small capital of fifty thousand, some Life Insurance Companies have amassed assets over several crores of rupees. It is not an unusual sight of mutual companies (without share capital) developing in India and world over. Those companies which cannot command decent capital in the beginning have to keep a strict watch over the expense ratio for few years of their start. If they can do so, they can amass sufficient capital out of the premium-income to make them as good and sound as the companies with bigger capital. The initial capital outlay of Insurance Companies specially Life Companies being very small—they can prosper as better as the other companies provided they can secure some business and keep an eye over expenditure in the beginning.

(b) Inefficient management—The percentage of failure for inefficient management or want of expert knowledge in any business concerns, is very great. If we look into the history of failures of the joint-stock concerns in England or in India we will find that in majority of cases the companies have to wind up for either inefficient management or for want of proper expert knowledge. Though efficiency in management and expert knowledge is a great way to develop an Insurance Company

and want of them stand in the way of growth—the premium tables and other schemes being almost same or similar, the Insurance Companies can, however, pull on without these important requisites of business. Look at the history of number of Joint-stock Companies which met reverses and look at the pulling power of Insurance Companies. It is not a fact that the management of Insurance Companies specially in India is carried on always by efficient and expert men. Still they are going on, doing good business and amassing good funds. Most of the Life Insurance Companies of India have been started by men who had no previous knowledge of Insurance Science or management still they are now the best companies in India.

(c) Bad investment of the assets. Banks, Loan Companies and other business concern go to liquidation if the investment of their assets prove to be a bad one or the investments of their assets are frozen up—such as investment in landed properties or in the like securities. The later class of investment though made on good securities can be classed as a long term investment. This has proved to be bad investment for Banking and Loan Institutions. In Insurance Companies—the

capital or assets that are invested can be done so on long term loans. They do not require the invested amount back provided they get the interest—unless it be for better investment purpose. Even if some of the investment go bad the Insurance Companies can withstand the loss by creating reserve fund. The fact is that the yearly new and renewal income of most of the Insurance Companies is sufficient to meet the expenses, claim and other financial commitment of the companies and scarcely they have to fall back on the invested amounts for the above purposes.

(d) Competition—Business concerns mostly manufacturing business have to stand against and compete with foreign manufactures. If their products cannot stand in foreign competition—they have to close down unless tariff duties or bounties from the Government help them. But in Insurance there is no such competition except a healthy competition amongst the Insurance Companies themselves. And it is not always the fact that the best managed Insurance Companies always get the best business. The experience is not unoften otherwise.

Any one of the above causes is sufficient to bring to collapse the working of any business concern but not so the Insurance Companies.

Success of the Indian Life Insurance Companies.

The stupendous growth of Life Insurance Companies in India demonstrate conclusively the benefits of adopting the up-to-date principles and methods of Life Insurance Companies as followed in the Western Countries specially in England, Barring "Expectation of Life" which is met in India by addition of 5 to 7 years to the mortality tables, the best managed Indian Companies are running *Paripasu* with the old established European and Canadian Life Companies ; and in some cases they are excelling them. From the dark history of the fall and decline of the Indian Shipping, Gunny, Cotton, Silk and Iron for not adopting the up-to-date Western methods we come into the region of Sun Shine and Land of Hope as shewn in the growth and success of Indian Life Companies. Unhampered by any quicksotic doctrine of the socialistic school as preached by the Congress, we find the Indian Insurance men are adopting and incorporating the most up-to-date methods whether followed in Europe or in Canada or in the United States of America. The Indian Insurance men are always alert as to any new idea or method in the line. Hence the cause of the success of the Indian Life Insurance Companies.

Indian Insurance Men are better than the foreign Insurance Men—

Though the Indians have learnt and adopted the Insurance principles from the old established foreign Companies—the abuses in the Indian Insurance Companies are few and far between. In fact the reply to the letter written by the writer to Mr. Meekle—the then actuary to the Government of India—admitted that there were no failures of Life Insurance Companies in India which were subject to the Indian Life Assurance Companies Act. We quote below the reply as contained in his letter No. 485 dated the 20th March, 1920 :—

“We have no particulars of any Indian Company which was subject to the Indian Life Assurance Companies Act 1912 and which transacted only ordinary Life Insurance business and went into liquidation.”

But when we look to the number of failures of long standing Insurance Companies in the Western Countries our appreciation always goes for the general run of the Indian Insurance men.

The difficulties of the Indian Insurance Companies—

(1) The Rules under the Indian Insurance Act are a great handicap for growth of Insurance Company.

It must be admitted that the growth of the Indian Life Companies is due not to a small extent to the salutary check exercised by the Indian Insurance Act and it must be said to the credit of the Indian Government Actuary that he takes always a paternal care for the growth and development of Indian Insurance Companies. He points out their mistakes, warns them if there be any latches but he has all love for the Indian Companies. He plays the role of a guardian Angel for the Indian Companies. But there are certain defects in the Rules that stand in the way of full development of the Indian Insurance Companies. Let us explain our point—out of about 136 Life Insurance Companies started in India very few are in a position to declare any dividend to the shareholders. In fact we find from the Government Insurance Blue Book of 1932 that out of the existing 136 Life Companies only 13 Companies are paying dividend to the shareholders—i.e. 9½ p.c. of the Companies are not paying dividend. Though most of the Companies are paying bonus to the policy holders so that their growth is in no way hampered by non-declaration of dividends to the shareholders but the fact reacts on the general public who are not attracted to purchase shares of the Life Insurance Companies as generally they

have to wait for a long indefinite period before they can expect any return on their investment. This is the greatest draw-back for getting requisite capital for Life Insurance Companies. And as a result of the inequitious rules under Life Insurance Act we find the capital of the Companies newly started is not a decent one. Most of the recent floatations are supplied with the capital by the managing authorities who in return of the capital investment participates in the income charged as expenses under management. And for older established Companies, the share holders being tired of waiting for a long period for a return on their investment dispose of their shares at a discount and at a nominal value which are generally purchased by some one belonging to the managing authorities as the public do not touch those shares. So in fact a good number of Life Companies are generally becoming more and more private concerns than healthy public bodies. This resulted in the appointment of Directors from their own men without any independence of their own. These directors play a second fiddle to the wishes of the managing authorities or proprietors, so to say, who run the risk of losing their service in case they go against them. So the salutary influence of the Companies laws are negatived and when we

consider the interest of the policy holders which will be seriously and vitally affected in absence of the wholesome influence of the independent directors, we are afraid, the present Insurance Companies rules while trying to safe-guard the position of the Policy holders are really undermining their very interest and leaving loopholes for the future mismanagement.

Remedies suggested.—The remedy we can suggest in the matter is to provide in the rules under Life Insurance Act—that 10 p. c. of the sum allotted as bonus to the policy holders should be distributed amongst the share holders irrespective of the fact whether there are any disabilities in the Balance Sheet of the Company. Why should the share holders alone shoulder the burden of any mismanagement and defects in the management? Either these defects should be wiped out before any sum is carried to the **Life Fund** out of the Revenue account or the share holders should be allowed to participate in a portion of the funds so created under the name and style of Life Fund and during a distribution of bonus to the policy holders the share holders should be paid at least 10 p. c. of the amount so distributed. The Investments of the share holders are as good as the investment

of the policy holders and in most of the Companies there are policy holders directors too. So why this differential treatment to the shareholders—who have contributed the capital for initial expenses and Government deposit without which the Company could not carry any business. So we suggest the present inequitious rules should be amended for the future growth and development of Life Insurance Companies in India.

2. Sub-section 3 of the Sec. 4 of the Indian Insurance Act is another handicap to start Life Companies.

Section 4 under the Insurance Act provides for the security deposit to be made by the Companies carrying on Life Insurance business. This deposit in English Life Companies is £20,000/- whereas Indian Companies it is only 2 lacs Rupees which can be paid by several instalments but the initial deposit must be Rs. 25,000/-; so far so good. Because this deposit serves as a security exclusively for the policy holders and as such it inspires confidence in the Company. But subsection (3) of section 4 proves a great impediment in starting a Life Company. The subsection (3) states regarding the initial deposit of Rs. 25,000. "The deposit may be made by the subscribers of the memorandum

of association of a Company or any of them, in the name of a proposed Company, and, upon the incorporation of the Company, shall be deemed to have been made by, and to be part of the assets of the Company, and the Registrar of Joint Stock Companies shall not issue a certificate of incorporation of the Company under the Indian Companies Act, 1882, until the deposit has been made." Unless the initial deposit is given "no certificate of Incorporation can be issued by the Registrar Joint Stock Companies which again means that the Company cannot invite the public or issue any prospectus for sale of its shares unless the deposit is given. By this *subsection* the legislators want the promoters of a Life Company to perform a magic feat by providing the initial deposit of Rs. 25,00/- before being empowered to call for the public capital. We do not find any sense in it unless it is meant by the legislators that only respectable classes of people will be allowed to start Life Companies. But what is about starting a Bank which deals with public capital or any other hundred and one classes of Joint Stock Companies which handle a good amount of the public money. If no restraint in their cases is thought advisable, why Life Insurance Companies should be *marked out* for such special treatment?

In no other classes of Insurance such as—Fire, Marine and Accident any deposit is required, far to place the initial deposit at the time of registration. If subsection (3) is done away with, the promoters can start a Company, issue prospectus, collect the necessary share money and deposit the same towards the securities of the policy holders before they can apply to the Registrar Joint Stock Companies for certificate for commencing business, i.e., undertaking any risk of Life. This should be the proper way of starting Life Insurance Companies and if the rules under Life Companies are amended as per our suggestion, Indian can be proud of at least 500 Life Insurance Companies instead of 136 of the same as at present—which we shall discuss in detail hereafter.

How the Life Companies can pay some yearly Return to The Share holders.

In considering the question of payment of some return to the Share holders we must look to Companies laws which enjoins that no dividend can be paid out of the capital. Under the present Insurance Act—all the money that is saved under Revenue account is carried to Life Insurance Fund for the policy holders and in some cases a small amount is kept to create a Reserve fund for Invest-

ment, So the share holders are generally kept out of account, and in small number of cases they are paid some dividend when Bonus to the policy holders are declared. If any return is to be provided to the capital investors—it can be done through some other method, which will not go against the present laws of the Companies Act or Rules under the Insurance Act.

(A) A provision in the memorandum and on the Articles of Association of the Company to pay out the income of the managing authorities "some percentage in a shape of a bonus to the share holders. Let us explain our position. If it is provided that the managing agents will be entitled to, say—5 p.c. on the gross premium income of the Company—provision can be made in the Articles that either the whole or part of the amount of income so derived from the premium income should be earmarked to pay "bonus to the share holders upto, say—5 or 6 p.c. till the Company is in a position in ordinary course to pay any dividend to the share holders. Supposing two lacs are the premium income of a Company, having paid up share capital of, say, one lac of Rupees. Under the Articles, the managing agents are authorised to draw Rs. 10,000/- i.e. 5 p.c. of the premium as

their remuneration. Now if the Articles earmark up to 6 p.c. for the share-holders, then the actual receipt of the managing agents would be Rs. 4,000/- a year and the share holders will get Rs. 6,000/- at the rate of 6 p.c. quite a decent return to start with. This will serve as an incentive to the managing agents who will strive hard to increase the premium income otherwise their income would be limited, and the share holders would be satisfied that they get certain return every year out of the premium income. Otherwise it is simply cruel to demonstrate before the share holders that the premium income of the Company is increasing every year by several lacs and that the funds of the Company is quite decent but that they are not entitled to any return for the better growth and development of the Company. This horrible practice of starving out the host—where both the guest and the management are sumptuously fed are a rare inequities of the Rules under the Indian Insurance Act and scares away the investing public to purchase shares of the Life Insurance Companies ; otherwise the shares of Insurance Companies would have been sold in the market like hot cakes and would have been in more demand than the good dividend paying shares of Jute mills and Tea Gardens.

As to the legality of payment of such bonus to the share-holders. We have seen that such payment is not against the substantive law under the Companies laws—as no payment is made out of the capital of the Company nor it goes against the Rules under the Insurance Act. So this sort of provision in the Articles and payment to the share holders are quite in order and legal. The Author in connection with the certain Life Insurance Company drew up the Memorandum and Articles of Association making provision of payment of bonus to the share holders in the above way, and in the first year the Company paid 5 p.c. bonus to the share holders. But the auditors of the Company, who are Chartered Accountants, objected to such provisions in the Articles of Association of the Company and referred the matter to the Chartered Institute of England. The opinions as to the legality of such provisions were given by three eminent lawyers of England and are published in the *Accountant*—the journal of the Chartered Institute. We quote below one of such opinions quoted from the "*Accountant*" of 6th December 1930....page 767."

"GUARANTEED BONUS (A773),...In reply to—— the consideration of the question of the right or wrong of the action depends

upon the rights of managing agents. Are we to take it that the remuneration of these Agents, is either fixed by the articles or memorandum or have the directors the right to appoint them at a fixed remuneration? If this remuneration is a legal liability then the fact that a refund is given for any specific objective must be intravires, as a man can do with his own money whatever he wants and any Company can receive remittances to pay to stated parties, if it desires to take the trouble to distribute. The point is parallel to the case of a limited company where a loss has taken place, and the managing director (being the vendor) hands over a sum to the Company to pay the preference dividend. This sum may be equal to his director's fees, but both transactions are in order."

(B) Starting other classes of Insurance business can provide payment of Dividend to share holders.

We have seen how in spite of present laws, the Life Companies can make some payment of bonus to the share holders. If it is not possible for the existing Companies to make any payment to the share holders by changing their Articles and memorandum of Association—they can start other classes of Insurance and can arrange to pay dividend to the

share holders. The Rules under the Insurance Act is only applicable to Life Companies and not to other hundred and one classes of Insurance business. In fact some prudent Life Companies in India have already adopted other classes of Insurance along with Life business and are paying dividend out of the profits of those classes of business and the share holders of those Companies have not to wait for the valuation Returns as are generally made quinquennially but can get some dividend at the end of every year out of the profits of other classes of business.

The existing old established Life Companies who are not under the present law in a position to pay any dividend to the share holders though they are paying bonus to the policy holders can with advantage adopt this method. These Companies have got a duty to their country. It is not that because they have passed the *Ass's Bridge* that they should remain contented but for the future development of Insurance Industry in India they should be up and doing to adopt some measures by which they can pay some return to their share holders ; and if they can do so—their share values will go up just as the share values of some first class Indian Insurance Companies.

Satisfied share holders are good advertisers of the Company which will ultimately enable the Company to write good business—dissatisfied share holders always speak ill of the Company and the good effect created by declaration of bonus are often marred by adverse criticism.

(C) Rules under Insurance Act should be amended to stop high expenditure of Life Companies.

It is very curious that the Rules under Life Insurance Act while regulating the payment of dividend to the share-holders are silent regarding the high expenditure of the Company.

You can spend any amount in management, organisation, agency account, and advertisement ; there is no law to bar those expenses, but you can not pay any dividend to the share-holders though the cost may be a fractional amount of the high expenditure of the Company. Most of the Indian Life Companies are run with a small paid-up capital in comparison with high yearly premium income—so it will be an easy task for Insurance Companies to pay good dividend to the share-holders—if the law is amended accordingly. Otherwise if the present law is enforced they should go further and limit the

high cost of administration and as well as the high cost of securing business. There must be some equity in the Insurance law and rules so that the share-holders may get some dividend. It must be the first concern of the legislators to see how best they can attract the share capital by making certain provisions in the Insurance Act as the German Insurance Act provide a certain percentage to be paid to the share-holders out of the profits to be distributed to the policy-holders—otherwise the present law will kill the hen that is laying golden eggs.

II Provident Societies Act must be done away with :—This Act was passed in the year 1912 when several small Insurance Companies went into liquidation and thereby caused a good deal of havoc and consternation amongst the insuring public. The Government in order to have a more direct control over those Class of Insurance Companies passed in a hurry the Provident Societies Act in 1912. It must be said to the credit of the Indian legislatures that in passing any Act, such as Companies Act, Life Insurance Act and hundred and other classes of Act, they usually follow the English Acts on the subjects along with their defects too. But in passing the Provident Societies

Act, they have shewn originality of their own. Now let us see what led to the failures of over 1200 small Insurance Companies in India which prompted the Government to pass the Provident Societies Act in 1912. There were two classes of businesses which were done and are being done at present under the Provident Societies Act. One is Dividing Societies business and the other is small insurance on the contingency of death, marriage, child birth etc.

First let us take the Dividing Societies business.—This class of business distribute the yearly collections realised from members, (excepting some small amount for expenses) amongst the members who meet death during the year. If we look to the genesis of this class of business we will find that in England in early years some clubs or institutions used to distribute the collection realised from the members amongst the legal representatives of the dead members. In fact the dividing societies business in England may be called the lenial ancestors of the present days' English Insurance Act.

The Dividing Societies business as they carried in India experienced insurmountable difficulties in actual workings, which led to their ultimate collapse.

These Societies enrolled members without medical examination. Supposing a Society has got 300 members male and female of any ages without medical examination has to meet death claim of 3 members in the first year. Now by calling each member to contribute Re 1/- towards the death of each member—the Society realise about Rs. 900/- and if 25 p.c. is kept for the expense purposes they get about Rs. 775/- to be distributed amongst the legal heirs of the 3 death members and so they can pay Rs. 258/- or there-about to each claimant. Now the members may have paid Rs. 5/- to 10/— but their legal heirs get Rs. 258/-. This serves a good advertisement in the villages and the Society gets good number of members in the second year—out of which the majority comes from old classes of people or who are suffering from diseases which will shorten their lives. In the second year though the number of members are great—the death call is greater. So the distribution become less and less as the year advances. Now when the existing members find that they are not even entitled to the amount they have paid in the shape of death call—they gradually fail to respond to the call notice, and thereby they ceased to be members. Knowing full well the above initial difficulties, we do not know how the Provident

Societies Act can allow such Societies to work in India, the Dividing Societies business as in vogue in England under the Friendly Societies Act are quite a different type.

But though there are initial difficulties—yet we believe that Dividing Society can work if the membership is restricted within workers of any Institution, and if some reserve fund is created and if there be no expenses in securing the business. Otherwise Dividing Societies enrolling unrestricted members of male and female without medical examination and without ascertaining their health and ages and without reserve will come to grief to-day or to-morrow.

Another type of provident companies is—taking some collection say, Re. 1/- a month with a contract to pay double the amount in case of contingency—like death, marriage, etc., which is nothing but a gamble. It is impossible on the face of it to contract for double payment in the above cases, so those class of provident companies also failed. So we find that the failure of the Provident Societies Companies are due to—

(1) Want of actuarial calculation of premium table.

(2) Want of no provision to place Government deposit. So the funds of the Societies, in most of the cases, have been put in bad investment.

(3) And in some cases through mismanagement.

This led to the passing of the Provident Societies Act. But the remedies the Act suggested cannot be of much use—in spite of the fact that the prospectus and rules are under the present law passed by the Registrar of Joint-stock Companies.

Now look at the Section 3 of the Provident Insurance Society Act—Re : Application of the Act.

‘Nothing in this Act shall apply to any Provident Insurance Society carrying on life assurance business, which undertakes to pay on any life assurance policy or series of life assurance policies on any one life, an annuity exceeding fifty rupees or a gross sum exceeding five hundred rupees, or which receives or undertakes to receive by way of premium or contribution for life assurance on any one life, any sum exceeding two hundred and fifty rupees, where the said premiums or contributions are payable for one year or a limited number of years, or exceeding twenty-five rupees in any one year where the premiums or contributions are unlimited in number and terminable on death or the occurrence of an uncertain event.’

The above also leave loophole for gambling. A Company registered under the Act can on receipt of Rs. 250/- pay claim of Rs. 500/- and in no year more than Rs. 25/- can be collected as premium. The more one goes through the Act, the more he is convinced of its queer idea of Insurance. That this Act can be so long in the Statute Book passes one imagination. This Act is responsible for floatation of Companies where there is every possibility of the policy holder losing their money. The sooner it is abolished, the better for India.

Defects in the Provident Insurance Societies Act 1912.

We have found the legislators who were responsible for passing the Provident Societies Act showed some originality in incorporating some defective clauses in the Act. If any one goes through Section 3 of the Act regarding application of the Act, he will find that the Section is not a positive one and the meaning and sense of the section have been made more obscure by certain negative conditions ; and the beauty of the whole thing is that though the Industrial Assurance Act has been passed in England in 1923, still no amendment has been made in the Provident Insurance Societies Act since 1912.

Again under Section 18 of the said Act, the Registrar of the Joint-stock Companies can send a Company to liquidation if he finds the company is not sound. As a corporation carrying on small Life Insurance business, the solvency of the company depends on actuarial valuation and not on anything else. Though it must be said to the credit of the Registrars Joint-stock companies that they have not misused their powers—yet the idea of the legislators of the Act to empower the Registrar (who is not an Actuary) to decide about solvency of the Industrial Assurance companies, is something extra-ordinary and original. Under the Industrial Insurance Act of England and under the Indian Insurance Act—the question of solvency of a Life Insurance Company big or small are decided by Actuary and not by any other authority.

India's need of new Industrial Insurance Act.

When we compared the low purchasing power of the Indian public with the high purchasing power of the people of the machine-using countries of the world—an Act for small insurance is felt a great desideratum. If we look into the growth and development of Friendly Societies in England, Fraternal Societies in the United States of America

and similar Societies in Canada and other countries we wonder why this small Insurance Companies cannot develop in India. To advanced people of India, the small Insurance companies are un-touchable like *Pariahas*. It is not the fault of the corporations under the Provident Insurance Act that they cannot make any headway but it is the fault of the Act itself that lead them to disaster. For example—following in the footsteps of the Friendly Societies Act of England, the Provident Insurance Act in India has got a Dividing Societies business ; but Dividing Societies in England stands on a different footing—the membership being limited to certain club or institution—while in India—the membership is in fact open to all—male or female, old or young without health examination. So the companies carrying on Dividing Societies business in India come to collapse after few years work. Knowing fully well of this—there is no authority in India to stop this class of business. In the end—the authorities of these companies are considered as unworthy of Public Trust ; but the inspiration and guidance should come from the Government. If large number of public have lost their savings through this class of institutions started under the Provident Societies Act, the Act is no less responsible for the mismanagement.

What India wants is an Act similar to the Industrial Insurance Act of 1923 as passed in England with some additions and alterations suiting Indian conditions.

First—Deposit under the Industrial Insurance Act.

When we look to the Friendly Societies Act in England—we find them mostly mutual companies and a small number of them, are share holders companies. They do not require to place any security deposit with the Government. The number of companies existing in 1927 under the Friendly Societies Act is 21,488 and the total number of insured under them is 7,429,506 of which 55,00,000 are adults, while the number of companies registered under Industrial Insurance Act is over 200. Now look at the staggering figure of total business in existence in such companies under Fraternal Insurance Act of United States of America in 1928—\$11,060,000,000 i.e. over three thousand, three hundred crores of rupees and the yearly business written by them is \$1,000,000,000 i.e. over 300 crores of rupee—whereas Life business in India is yearly written about 17½ crores of rupees. Amongst the leading companies of Fraternal Insurance Act mention can be made “of Fraternal Order of Eagles” with

5,20,000 members and Woodmen of the world" with 5,00,000 members. Industrial Insurance Act of 1923 of England requires a security deposit of £20,000/- as the English Life Insurance Act requires. But in India it is not possible to place such a high security deposit. We think if security deposits of 1 lac with an initial deposit of Rs. 10,000/- worth of Government Paper, are insisted on, with a condition of paying 20 to 25 p.c. of each year premium collection in shape of security deposit—till one Lac is placed—India can be proud of at least 10,000 sound Industrial Insurance companies within a few years time and with the increasing purchasing power of the people through industrialisation of the country—India can be proud possessor of at least 25,000 companies under Industrial Insurance Act. Any body who will be in a position to raise Rs. 10,000/- by selling shares can start an Industrial Insurance Company. Because the initial deposit of Rs. 10,000/- can be purchased at Rs. 7,000/- say—3 p.c. G. P. Notes and Rs. 500/- will be the initial cost of registration and printing prospectus. With that small sum Insurance risk can be undertaken. The passing of such Industrial Act will create a revolution in the Insurance world. Only the following additions and alterations will be necessary.

I. That as most of the Companies will be share holders company—the present rules regarding payment of dividend to the share holders should be amended ; and if actuarial valuation is made at the end of every three years (and not at the end of five years as per Indian Insurance Act) and if 10 p.c. of the Life Insurance funds that would be distributed amongst the policy holders in the shape of bonus are distributed amongst the share holders in the shape of Dividend—then there will be no difficulty in raising the requisite share capital for such companies.

II. Instead of the Registrar Joint-stock companies, an Actuary should be appointed in each province under the name of Commissioner of Insurance, to be in charge of such companies under Industrial Insurance Act. The duty and function of the Actuary, should be similar to those of the India Government Actuary under Indian Life Assurance Act.

Types of Industrial Insurance companies.—The Friendly Societies and Industrial Insurance Companies in England carry on small Life Insurance the maximum being fixed at £200 which has been increased to £300 now. Besides, the small Life risk, they carry on accident risk

such as Sickness Insurance and small Fire risk generally up to £15 as well as Cattle Insurance. But in India, specially in Bengal, where nearly 25 p.c. of the people suffer from malaria or other classes of diseases—the Sickness Insurance will not be paying business, and if it is undertaken the rate of premium will be prohibitive. So we do not approve of Sickness Insurance until such period when the companies are fully developed. We think the following classes of business can now be safely undertaken by the Industrial Insurance Companies.

First.—Small Life Insurance up to Rs. 500/- in the beginning, but when the Government deposit of any company reaches up to Rs. 25,000/-, it may be allowed to cover risk up to Rs. 1,000/- and when the security reaches up to Rs. 50,000/- the risk may be undertaken up to Rs. 2,000/-. Only those companies which will be in position to place security deposit of 1 lac, may be allowed to cover risk up to Rs. 5,000/-. The rates of premium should be drawn by the Actuary. As in Japan, England and other foreign countries, the small Life risk cover is issued for children, so this system should be introduced in India. Under the Contract Act—the contractual parties must be

adult. Following in the footsteps of other advanced countries who carry on Industrial Insurance, special provision must be made in the Industrial Act allowing children of certain age for making Insurance contract—so that school children can go in for such Insurance.

As the accidental death in villages through snake-bite or ravages of wild animals, in country boat disaster and thunder-stroke and in town through motor car or other vehicular accidents is very common, special provision can be made in the said Insurance Act to cover all accident death by payment of small extra premium so that higher benefits under the policy can be secured.

Annuity scheme—should be introduced allowing the Company to pay annuity up to Rs. 10/- a month in the beginning, rising up to Rs. 100/- a month for the Company placing Re. 1 lac deposit with the Government.

Second—Provision for marriage, education, Industrial Agricultural concern or other class of business.

There is a great demand for Insurance of the above types in India. Provision for marriage and education of children as well as provision

for a fund to start any business—is in great demand in almost all homes.

Third—Fire Insurance—Most of the people in India live in thatched houses. Small Fire Insurance from Rs. 200/- rising to Rs. 2,000/- when the full deposit of Rupee one lac is made, if undertaken by the Industrial Insurance Companies will serve the purpose well.

Fourth—Marine Insurance.—The country boats in India generally ply to carry heavy commercial loads. It will be safe for the owner of the goods as well as owner of the boat, if country boat Insurances are undertaken for Rs. 500/- in the beginning rising to Rs. 3,000/- on placing the full deposit by the Industrial Insurance companies. At present though there is a very great demand for this class of Insurance—no foreign companies have touched it.

Fifth—Burglary Insurance.—Theft and dacoities are frequently committed in India in respect of money and ornaments. Burglary Insurance can be undertaken in the beginning for Rs. 500/- rising to Rs. 3,000/- when full deposit is made.

Sixth—Cattle Insurance.—The wealth of peasants of India consists in a few bighas of land

and some cattle They suffer a good deal when these cattle die of any disease. If Cattle Insurance is undertaken with the maximum fixed at Rs. 200/-, good amount of business can be done in this line.

Seventh—Fidelity Insurance.—This can also be transacted on a small scale by the Industrial companies.

Eighth—Transport Insurance—Goods are booked through several carriers such as Railway, Steamer, Country boat, bullock cart etc. It is often found that the goods are damaged in transit. So any insurance covering the transport may be done in small cases by the Industrial companies.

It must be noted that at present no deposit is required to carry on any of the above types of business. But we insist on deposit as the surest method of creating confidence in the companies transacting these classes of business under the proper guidance and help of an Actuary, who will be called Insurance Commissioner and not the Registrar of the Joint-stock companies as at present.

The passing of the Industrial Insurance Act is the surest way of helping the Industrial companies. Some people doubt whether mere passing

of an Act is sufficient to the growth of such companies in India where the general run of people is proverbially so poor that the regular payment of premiums will not be possible for them. Industrial development of a country which India lacs, increases the purchasing power of the general public and can enable them to make regular payment of premiums. But so long as India will remain an out and out agricultural country—where the value of the agricultural produce is liable to suffer in prices owing to the lack of foreign demands or due to any depression caused by the exchange policy of India or of any foreign country, regular payment of premiums may be difficult.

Remedies Suggested.

In case of inability of the policy-holders to make regular payment of premiums owing to the above causes—**firstly**,—some form of Extended Insurance can be introduced by which the policy can be kept in force for certain period without payment of premiums and if claim arises—the claim payment will be valid with or without deductions of the defaulted amount of premiums.

Secondly.—In the Insurance world the money that is paid by way of premiums and the money that is received by way of claim—both roll in a co-

operative circle in the society acquiring a fresh stimulus in its movement. In each payment of claim besides the moral force it imparts—the economic force is still greater in the Social Life. Money once mobilised for Insurance or any successful Industrial or Agricultural pursuits begets money—the dynamic force of which reacts on the whole social fibre. Now let us illustrate our point—supposing a man dies after payment of two years' premiums on his policy for Rs. 500/- when the claim is paid to the legal representative of the policy-holder the neighbours of the claimant can borrow money from him to pay premiums during their distress. So the claim paid by the Company may be received back to a certain extent in the shape of premiums from the policies owned by policy-holder's neighbours. In this way the Insurance money rolls on and on.

By the above two methods the temporary depression as experienced by the policy-holders can be overcome.

Thirdly.—If India undertakes to complete Industrialisation of the country as chalked out in this book, the purchasing power of the people will increase. So they will be in a better position to go in for insurance. We have shewn elsewhere that

in the United States of America which consists of 11 crores population, the small Insurance, yearly written by the Fraternal Societies, comes to more than 330 crores of rupees. If we consider the fact that India—which possesses more than 3 times the population of America—if India gets the opportunity to increase its purchasing power through Industrialisation of the country—India can command at least the same amount of small Insurance as is yearly written by the Fraternal Societies in U. S. A. as compared to the present Insurance business of only $17\frac{1}{2}$ crores written in India by all the Life Insurance companies.

Fourthly.—When any Government measure is undertaken suitable to the needs of the country—the business develops itself without much canvassing. For example—before the import duties on foreign matches—there were yearly imports on an average of 1 crore gross matches in India. Now taking advantage of the import duties—the match factories have developed in the country and the foreign import is almost nil. The Tariff import duties on sugar have encouraged in an unprecedented way the starting of sugar factories in India. In 1933-34—there is 50 p. c. fall in sugar import and the Government expects that by 1935, India will be

self contained in her requirement of sugar and there will be no foreign imports in 1935. Similar cases can be found in cotton Industry—through the Cotton Tariff Act—the Indian mills are taking advantage of the import tariff and the production of Indian mills have increased from 1800 million yards to 2990 million yards in 1932. Though through Ottawa Pact and the new Pact with Lancashire and Japanese, the full value of the tariff duties can not be utilised by the Indian mills—still the Government measures have given great encouragement to the development of cotton Industry in India. Similarly the import duties on the foreign steel have given enough encouragement to the development of Tata's and future steel industries in India. So it can be expected that passing of a proper Act in the name of Industrial Insurance Act with conditions as stated above, will give tremendous facilities for the development of small Insurance in India and we will not be surprised that India will be in a position to start at least 10,000 Industrial Insurance companies of different types and more so on the increase of the purchasing power of her people through Industrialisation of the country along with some fixed minimum value of her agricultural produce.

The Social and Political Services of Insurance Companies.

India being proverbially poor with low purchasing power of her people—the best type of Insurance that suits her for sometime to come is Small Insurance ; and if the Government takes the initiative towards undoing the evils done by substituting the Provident Societies Act of 1912 by a new Industrial Insurance Act with terms and conditions stated above it will give tremendous opportunities for development of Industrial Insurance of various types in India. The small resources of the people will be mobilised and those Insurance companies will be pride of India. They will not only save from ruin a family in case of untimely death of its bread-winner or loss of cattle or house from fire or ornaments or belongings from decoity and burglarly—but these companies will be a good source for helping the Government during floatation of any loans. The British Government knows what splendid services were rendered by the British Insurance companies by subscribing to the war Loans which made it possible for the British Government to bring the war to a successful issue. If like Indian Government, the British Government would have been unmindful of the development of her Banks and

Insurance Companies, the history of the **Great War**, would have been otherwise. The mobilisation of the Indian resources for the economic development of the country as well as for the better revenue of the Government has never been done uptil now. The present India demands a proper machinery to mobilise her wealth in a proper channel. The only machinery that is in existence to-day is a crude method of raising Government or Semi-Government Loans, Postal Savings Banks deposit, Postal Cash Certificate or Treasury Bonds. But the people with small resources whose number is over 95 p. c. of the population do not take any interest in such investment, rather they are fond of burying their small deposits under earth. If proper machinery is invented by way of some special Acts as stated in this and some other chapters of this book—the proverbial hoarding spirit of the people will cease and they will come forward with their small assets to invest in the Government Loans to be utilised for the National Industries of the country or for this and that Insurance Companies. From the phenomenal growth of Life Insurance companies after the passing of Life Insurance Act in 1912, it can be safely expected that passing of a new Industrial Insurance Act will give sufficient impetus

to the growth of small Insurance companies in India.

Ordinary Life Insurance Companies and their duties towards India.

Scientific culture of Life Insurance policies through increased purchasing power of the people.

It is an admitted fact that the purchasing power of the Indian people is abnormally low—it is also a fact that a large number of people are willing to take Life policies, but the fear of default in regular payment of premiums stands in the way of their Insurance. The yearly total of Life businesses is only 17½ crores of rupees in a population of 35 crores in India; and as per experience of the most Life Offices if the average amount of each policy be Rs. 1,500—then about 1,17,000 people go in yearly for Life Insurance policies. It is a mere drop in the ocean. Every Life Company is trying its utmost to secure bigger volume of business; and people generally judge the standard of the Life Company by the volume of its yearly business. As per the latest Government Insurance Blue Book—we find that about 40 p. c. the new business of 1932 has lapsed in the first year. So it stands that out of 1 lac 17 thousand people who insured in 1932 only 70,000 policy-holders remained in the

books of the Company in 1932. Again the total Life Insurance in force in India up to 1931 is 98 crores of rupees and as before taking 1,500 as the average policy on a single life, we can take 6,53,333 as the total number of policy-holders in India with population of 35 crores. So we find that bonafide Life policy that can be counted yearly is one amongst 50,000 people in India, and in every 5,300 people in India one person is covered by Life Policy and we will not be wrong in our surmises if we say that the purchasing power of the people scarcely allows them to commit to the yearly payment of premiums at the average rate 5 p. c. premium, a sum of Rs. 50/- per year for an insurance of Rs. 1,000/- even. Now the question is,—have not the Life Insurance Companies any duty towards increasing the purchasing power of the people? Following is in the footsteps of the foreign Life Companies—the Indian Life Companies do not bother their heads about this important question. They bask in the sun-shine of prosperity of the country and do not feel it their duty to add to or increase it.

Assets of Life Companies and Investments.

The total assets of the Indian Life Insurance Companies are about 29 crores of rupees—out of

which 23 crores are invested in stock exchange securities, 4 crores in mortgage, loans on policies and in stocks and shares, $1\frac{1}{2}$ crores in land and house property, the balance amount in deposit with Banks and in other foreign securities, and out of the above 4 crores investment in mortgages, shares and stocks assuming that rupees one crore is the investment of the Indian Life Insurance Companies assets, in mortgage and in stock of shares of the Industrial concerns ; the total investment on an asset of 29 crores is less than 3 p. c. ; whereas in the United States of America out of the total assets of 4509 crores of rupees belonging to the Life Insurance Companies, about 2930 crores i.e. about 65 p. c. of their total assets are invested in the development of the Industries. Besides, out of the balance of 35 p. c. of their assets the major portion is invested in Banks which in their turn invest the same in industries. So by way of direct and by indirect investment through Bank, the industries in America are greatly financed by the assets of the Life Companies.

Scientific Culture of Life Policies.

The development of industries of any country means more increased purchasing power of the people who can go in, for life policies in

numbers. The knotty problem of the Indian Life Companies, is how to increase the purchasing power of the Indian people so that it will enable them to secure more Life Policies. **This will be scientific** way to culture life policies. The present method of Indian Life Companies is to secure Life cases from the public earning from other sources will not carry them further. Their progress of business will be seriously hampered if they do not devise some other method to increase the purchasing power of the people—on whose paying capacity their very existence and progress depend. If these fundamental facts are realised by the Life Companies, a way can be found out for them. The assets of Life Companies can only increase by compound interest—so, at the present Indian market, the safest investment lies in G. P. Notes or in stock and debentures of the public bodies—such as in Municipality, Port Trust etc. besides the debenture of first class industrial concerns as a jute mill debenture affords scope for investment of Life fund. The investment in lands and buildings either in purchase or in mortgage, though safe, yet regular interest cannot always be expected from them. The prices of Government and other Public Bodies loans and debentures which pay regular interest often fluctuate and if the market

prices of them go down—the company has to wipe out a good portion of their assets and in case of mortgages, if the properties are put to sale, the full value is not recovered often. So in whatever way the Life fund is invested, there is always one or other kinds of difficulties to face and it cannot be said with any amount of certainty that one particular class of investment is the safest investment for all time to come. Being in a predicament like this the authorities of most of the Life Companies spread their assets in several classes of investment which enable them to fulfil the policy-holders' obligation in payment of claim and bonus and in small number of cases shareholders' too, in payment of dividend.

How to Increase the Purchasing Power of People.

If the Indian Companies want to thrive in future, they should make a combination to utilise part of their assets in the development of the industries of the country. Now the best course to do is to start a Federation of all the Indian Insurance Companies and if 10 p. c. of the assets of the Companies are utilised towards the purchase of the shares of Federation—the assets of the Federation will be about three crores of rupees to start with and if out of about 5 crores

of rupees yearly premium of the Insurance Companies, $2\frac{1}{2}$ crores are yearly saved and invested and 10 p. c. of the same i.e. 25 lacs of Rupees can be yearly contributed to the Federation shares. Now if the Federation, in the role of Managing Agents, undertakes to float public companies for industries—the necessary capital will be forthcoming from the public. If the actual capital that Tata initially invested in their steel factory at Jamshedpur, which is employing about 20 crores of rupees—we will find that a very small amount they actually invested initially in the big factory. It is rather their initiative and brain that counted much to the success of the factory than their actual cash money. So it is the case with most of the first class Managing Agents' firm in India. Their credit and Finance inspire confidence in the public who contribute to the shares of the company they start. Thus the Federation with 3 crores working capital to start with and with further 10 p. c. of their yearly invested assets of the Insurance companies that is about 25 lacs yearly make a very powerful organisation in the country.

Capital Invested by Federation will earn dividend from the Beginning.

If the Federation becomes the Managing Agents and start industries, the income they will

earn from the business in shape of managing agency allowance and commission will be sufficient to pay at least 6 p. c. interest on the capital invested from the federation fund which will compare very favourably with any first class British firms who earn over crores of rupees in normal years. The Blue Book of 1932 states that the average interest earned by the Insurance Companies are the following :—

Rate of interest	1922	1923	1924	1925	1926	1927
	5.96	6.26	5.93	5.70	5.70	5.56
		1928	1929	1930	1931	
		5.35	5.49	5.44	5.42	

Over and above the allowance and commission of the managing agency firm—when a profit will be declared in any industries it will be an additional amount on 6 p. c. so the invested capital of the Insurance Companies will always be in a position to earn more interest than they are at present earning and if by this way the Federation can properly handle the industries, it will be found that investment in Federation shares by the Insurance Companies will be more paying than in any other investment and it can be expected that like United States of America, the major portion of Indian Insurance fund will go towards the development of industries of the country. These

Life Companies can play a very important part and can create revolution in the domain of Indian industries and more industries mean more purchasing power of the people and therewith more policies for the Life Companies.

Pooling Arrangements.

The Insurance Companies will invest the funds in proportion to their assets. A big company will pay more than a small company. So the Insurance business that will be secured from the workers of the industries would be distributed according to the funds invested by the company and if fire risk and risk under Workmen Compensation and other accident risks are undertaken, the premiums and risk can be distributed according to the funds invested by the respective companies. So it is not only by way interest on invested capital the companies will be gainer but in business too which will be secured without cost on agency like *Postal Insurance*.

How Capital will be raised from the public.

The combination of big Insurance companies will be sufficient security for the public to subscribe to the capital of the industries which will be taken in hand after thorough enquiry and under expert

management. Besides there are army of agents of Insurance Companies who also will be in a position to sell good amount of shares to the public. So it can be expected that Federation of Insurance Companies will be in a better position to raise the necessary capital better than any other firm or persons in India.

Constitution of the Federation.

The Federation can be registered as a Public Limited company, its membership being limited to only Insurance Companies. Just as Directors are elected by the share holders in their general meeting so the Directors of the Federation will be elected yearly or at every third year. There will be one Managing Director appointed from the Directors. The earning of the Federation by way of commission and allowance will be distributed amongst the members according to their shares minus the necessary expenses incurred in running the show. This Federation will start Limited Companies for developing the industries of the country and as the practice go—in starting every industries not only expert Indian or foreigner should be appointed but the Directors should be taken from outside commanding public confidence or business capacity. The Federation

should not directly carry on any business except as managing agents. If in any industry there be delay in declaration of profits to the share holders—the capital invested by the Federation will always earn some profits in the shape of allowance and commission and it is not usually that Federation has to invest in the shares of the industry more than 10 to 20 p. c. of the total share capital of the Industrial concerns. The balance amount can be kept in fixed deposit or in marketable securities bearing interest.

**The Insurance Companies that will not join the
Federation.**

It is now option for any Insurance company to join any Insurance Association ; but Insurance Companies will find it to their advantage and benefit to join the Federation. If some of them do not, they will run the risk of losing the public support and the fact of their not joining the Federation will be made capital of by the Agents of the Companies who would be members of the Federation. So the fear of any propaganda that may be started against them these companies will join the Federation.

It can be hoped that if the Insurance Companies who are all business bodies make a combination as

above, the combined capital and good names of the Insurance Companies will bring in a period of Renaissance to the Indian industries to the benefit of all concerned.

The place of the Federation scheme in the Development Trust as chalked out in this book.

Federation though constitutionally different from the Development Trust as chalked out in this book, really aims at the same and similar object—namely, the increase of the purchasing power of the middle class people by giving them employment through Industrialisation of the country. The difference lies in the fact that whereas it will take time to make the Government convinced of the utility of the schemes and get their support, the Insurance Companies can without loss of time plunge into the matter by forming a Federation. It is in the hands of the some business men, who, if they are convinced of the usefulness of the scheme can form the Federation and at once can make a start in the right direction. If India be fortunate to have industries under Development Trust with Government support both organisation, can go on hand in hand for the benefit of India—the successful experience of the Industries under Federation will make the matter

easy for the Government to launch upon industrialisation of the country under Development Trust—guaranteeing the minimum interest of 4 p. c. to the Investors. India affords ample scope for several big organisations to utilise the vast untapped resources of the country for Industrialisation and scientific agriculture.

**The Industries that can be successfully run by the
Federation of Insurance Companies.**

First—Motor car manufacturing Company.—There is no motor vehicles factory in India, though the use of motor cars, motor buses and motor lorries is daily increasing. All the motor vehicles come from foreign countries on an average of 4 crore of rupees a year. If a motor car factory is started in India in or near Jamshedpur town after making some arrangement with Tata's factory for supply of steel and iron forgings, we think, a Company starting with an initial capital of 1 crore of rupees or so, can manufacture motor cars in India, and as there is an import duty of 37 p. c. on the foreign cars, motor manufacturing will be a paying industry in India. It will not be out of place to repeat that Ford's motor car factory was started in 1903 with a paid-up capital of 28,000 dollars i.e. about 85,000 rupees. Ford was suc-

cessful with that small capital to build up the biggest motor car industry in the world and this small capital was increased in 1919 to 30 million dollars. The average yearly wages that Ford pays to his labourers are over 60 crore of rupees i.e. about 50 p.c. of the total revenue of the India Government. Any unskilled man that finds employment in Ford's factory gets 6 dollars a day i.e. nearly Rs. 19/- a day. There are over one Lac 25 thousand workers in the Ford's motor car factory at Dearborne. If one-tenth of the wages of the workers is utilised towards the Life Insurance premium, it will be more than 6 crore of rupees i.e. more than the yearly premium income of all the Indian Life Companies put together—secured from India, Burmah, Ceylon, States Settlement and East Africa and some from South Africa. This makes the difference between India and America and other Industrial countries.

If the labourers are recruited from the middle class young men of India, the Federation can expect a decent amount of business from the workers of motor vehicles manufacturing industry in India besides at least 6 p. c. dividend to the share capital invested by the Federation of Insurance Companies.

to such industry. Supposing if one-tenth of the capital is supplied by the Federation towards the motor vehicles industry—it can earn sufficient allowance and commission as Managing Agents to pay 6 p. c. dividend to the capital investment of the Managing Agents' firm, and profit being declared on the shares further dividend can be allowed on such shares.

In the above way, the Federation of Insurance Companies, can start **Shipping Trade in India**—If in England one ship company can be successful—we don't see why the Federation should not be successful with few steamers for continental or coastal Trade. The addition of steamers will depend upon the success they attain in the line.

Shipbuilding yards and machine manufacturing companies—can be started in the beginning from the steel plate and iron supplied by Tata's Steel Factory—these industries can be taken in hand by the Federation.

Jute mills—are also a paying industry. They can employ a good number of middle class young men in the above industries, namely—motor vehicles manufacturing industries, shipbuilding, machine manufacturing etc. and they will necessitate opening of **fresh steel factories** in India, and all these

industries can be developed through joint-stock companies laws.

Wider field of Insurance to be tapped by the Indian Life Insurance Companies.

There is a vast field for Life policies outside India. Though a very few Life Companies have gone out of India, all their activities are confined to Ceylon, Straits Settlement, East Africa and South Africa. It is very strange that while the Life and Accident companies of England, Canada, Australia, America, China and Japan are tapping the Indian field for Life and Accident policies, the Indian Life companies are satisfied with small business they are getting from India and its neighbouring countries. The Indian Life Insurance companies lack in the adventurous spirit which we generally find in the sister companies of foreign origin. Just as the ocean routes are free to all ships of all nationalities, so are the foreign Insurance fields. The only difference lies in the fact that in some countries, they insist upon some deposit before they allow the Insurance Companies to commence any business and in some countries in addition to the security deposit they insist upon certain amount of their yearly premium to be invested in those countries. It is now high time

for the first class Indian companies to try the foreign fields for Insurance. If some Canadian Company can trade under more than 30 National Flags, why not these Indian Companies? In fact Insurance companies carry with them not only the principles of economic conquest but along with it the moral conquest too. The good dealings with the Indian policy holders by the foreign companies impress India with high sense of business morality of those countries. They demonstrate their superior organisation not by lectures but by actual facts. The first class Indian Insurance companies can play the same rôle in the foreign countries as the foreign Insurance companies are doing in India. For lack of wider out-look the Indian Insurance companies are making tremendous headway. 'Oriental' Life Company is the Premier Life Institution in India with almost the same age with Sun Life of Canada—which trades all the world over. Now look at the difference between the assets and yearly revenue of both the companies. Sun Life is credited with more than 100 crore rupees assets whereas Oriental with 10 crores, i.e. about 10 p. c. assets of Sun Life Insurance. The yearly revenue of Sun Life is over 32 crores whereas that of 'Oriental' is about 2 crores. The explanation can be found

(besides the difference in the policy conditions of the Companies) in the fact that the management of Sun Life Company are not content with the business of Canada only but they have the grit and business capacity to trade in almost all the countries either within British Empire or outside it.

Crop Insurance.

Since the inauguration of the Insurance Schemes in the western world, specially in the United States of America, every conceivable form of Insurance has been introduced. The advanced countries are not satisfied with Life, Fire, Marine, Ordinary Accident and Fidelity risk but they have tried to introduce Insurance Scheme in every form of human assets and transaction. Thus we have got in America big Insurance Companies transacting Title Deed Insurance covering the risk of bad title in case of sale, mortgage and lease of real properties. Other Insurance Companies carry on Credit Insurance and cover the risk of breach of contract. Of late some Insurance Companies are carrying on Engagement Insurance and underwriting the risk of breaking marriage after Engagement. We have got Key Insurance in England which covers the risk of loss of keys. Besides Transit and loss of profit

Insurances there are hundred and one classes of Insurance that are transacted in the advanced Countries. In India we are still an infant regarding Insurance matter. Most of the Companies are carrying on Life Insurance business while very few undertake Fire, Marine and Accident risk. It is not because, that there is demand of those classes of Insurance, but because there is no Company to cater to those needs of the Indian Society. We think even in the present market if Insurance Companies are started to meet the manifold social demands there is a good scope for the same. But the Indians are a conservative people, who lack in the initiative and adventurous spirit that characterises the people of the advanced countries. They will rather tread on a over-crowd a line than go in, for a fresh field and pasture a new.

Besides the different lines of Insurance as are in vogue in the advanced countries, there is a very good field of Insurance in underwriting the risk of failure of crops. The Crop Insurance covering the risk of failure of crops for whatever causes if introduced in India will bring in an revolution rather an evolution in the economic life of the Indian people. We have shewn elsewhere that India stands second to United States of America

regarding her agricultural produce and 75 p.c. of the Indian people depend directly or indirectly on agricultural produce. And in no country of the world the agricultural produce is subject to such whims and caprices of nature as in India. There are two substantial plans that can help the agriculture of India.

Firstly—To protect the labours of the peasantry of the country by introducing the Crop Insurance.

Secondly—To protect the price level of the staple agricultural produce so that the price level may not fall down beyond certain level. Otherwise the theory of more agricultural produce very often connotes less price for the same and support the theory of those who advocate curtailment of cultivated area as means of raising the price level just as has been done in Tea Industry. As the fixing of price level of the agricultural produce and financing the same, rests with the Government—and as we have shewn that the Government can earmark a sum of Rs. 25 crores for the purpose out of its increased revenue we shall take up the first item, namely—Crop Insurance for our present discussion.

We ask our readers to imagine the conditions of trade and commerce in the period when there was no Fire or Marine Insurance introduced in the

world. The individual merchant owning ship or any merchandise for sea transport often met severe losses when his ship or merchandise was lost in the ship—similarly the loss of any goods through fire often proved ruin to the merchant. Now these merchants are protected against any loss by Marine or Fire Insurance. Similarly, the peasantry of India who bestow all their labour and energy to raise crops which supply the food and clothing and other necessary expenses not only of his own family but for the families of majority of Indian population often suffer for failure of crops. Though in the advanced countries, there are hail-storm Insurance, storm, tempest and flood Insurance and Weather Insurance which undertakes to cover the loss or damage to the crop through any of the above causes, in India, we have not an Insurance Company, to cover the risk of failure of crops.

Crop Insurance is Famine Insurance.

In no part of the world famine is so much rampant as in India. In almost every year there are records of heart rending accounts of death due to starvation, principally through failure of crops in certain places of India. Government method of granting famine relief is a most dilatory and

antiquated method. The other method of giving relief is through public charities which, though often helps a good deal is not commensurate with the gravity of situation. In almost all the advanced countries, Government earmark substantial sum as a charge on the revenue of the country towards the unemployment and we have shewn elsewhere that the British Government earmark annually a sum of about 60 crores towards the unemployment doles. The India Government has never tried to find out the exact number of unemployed in India, for the fear of their number being as countless as stars in the Heaven. The position in India is different. Whereas the people who cannot find employment in any industry in the advanced countries are known as unemployed—in India the vast majority of people whose main profession is agriculture, suffer very often through failure of crops ; and in ordinary sense of the term we cannot call them unemployed but in all practical purpose they are so. So if unemployment Insurance is financed by the British Government in England, why we should not get support of the India Government for Crop Insurance in India ? Moreover if the condition of the peasantry can be kept in good state by the introduction of Crop Insurance, the purchasing power of the Indian

people will not then be much affected and as such the custom revenue of the Government of India on the import will not suffer. If Crop Insurance is introduced along with the fixing up of minimum price for some staple agricultural produces—India can weather any storm of financial distress of the world.

Method of calculating the premiums of Crop Insurance.

In Life Companies the mortality table and in Fire and Marine and other class of Insurances the **average loss** table guides the calculation of premium. But no one has tried in India in a scientific way to find out the average loss through failure of crops. If we make an attempt to find out the average loss table we should enquire first as to causes that led to failure of crops in India. In the ancient Sanskrit text, we find there are five enemies (পঞ্চ ইত্যঃ) to the crops, namely—অতিবৃষ্টি, বর্ষাবৃষ্টিমসকাশলভাসুকাঃ Heavy rains (inundation), drought, mosquito, flies and insects ; add to this there is another pest in Bengal generally known as waterhyacinth. Earth-quake, hail-storm and storm may be added to the causes of failures of crops. So in all we find there are nine natural causes that led to the failure of crops in India.

But the main causes are either inundation, drought or waterhyacinth (as in Bengal). Now if we can introduce Insurance Scheme to cover the risk of failure of crops through whatever natural causes we can meet the most vital problem of the agriculturists of India.

Circumstances that are to be taken into account in calculating premium.

1. Different classes of soil in the same area.—The soils often differ in quality and productivity in the same area in Bengal. So if the soil in upland is suitable for production of jute, rye, ous paddy (certain class of paddy) sugarcane, potato—the soil in the low lands is suitable for the cultivation of paddy only. Again though the soil in the upland is immune from the depredation of waterhyacinth the crops in low land soil is often destroyed by it.

2. Adequate rainfall is not the surest Barometer to the successful raising of crops in the same area.

The fact is that the peasants in the same area often sow their cultivated lands earlier or later ; so the rainfall which is beneficial to one is not often so in the other. Hence the adequate rainfall in any area is not the surest proof to the successful raising of crops.

3. The average yield of each particular soil can only be the basis of rating premium.

4. Government estimate of the area of cultivated lands and estimate of crop is only possible method of calculating premiums.

In absence of any other sure method of calculating the average yield of soil—the best course left to, is to do the same on the Government or other bodies estimate of cultivated area and estimate of yield. In jute cultivation we find the following estimate :—

The estimated area and yield of jute in Bengal, Assam, Behar and Orissa and other places.—

Year.	Area under Jute in acres (a).	Yield in bales of 400 lbs. each.
1919—20.	2,821,500	8,428,000
1918—19.	2,500,400	6,955,600
1917—18.	2,736,000	8,864,600
1916—17.	2,702,700	8,305,600
1915—16.	2,375,900	7,340,900
1914—15.	3,358,700	10,443,900
1913—14.	2,911,000	8,893,900
1912—13.	2,970,500	9,842,800
1911—12.	3,106,400	8,234,700
1910—11.	2,937,800	7,932,000
1910—11 to 1914—15.	3,057,000	9,069,000
1905—06 to 1909—10.	3,264,000	8,136,000
1900—01 to 1904—05.	2,335,000	7,036,000
1895—96 to 1899—1900.	2,035,000	5,771,000
1892—93 to 1894—1895.	2,207,100	5,621,100
1886—87	1,204,000	3,852,000
1880—81	910,000	2,730,000
1872—73	926,000	2,778,000

So it is found that on an average each acre of land under jute, produces $2\frac{1}{2}$ bales to 3 bales (each bale is equal to 5 mds.). Hence if we fix $2\frac{1}{2}$ bales i.e., $12\frac{1}{2}$ mds. of jute as the average yield per acre of land under jute—it will afford a reasonable basis for calculating premium. Similarly in cotton, paddy, wheat and other agricultural produce including the produce of fruits, teas, shellac—we can find out either from the Government estimate or from estimate made by other bodies the average yield of cultivated soil. In each tea and coffee estate or sugarcane plantation there is an estimate of yield per acre of land under tea and coffee or sugarcane.

Just as the average loss in Fire, Marine and other classes of Accident Insurances, average longevity and mortality table in Life Insurance case from the basis of calculating premium, so the average yield per acre or given area of land or given number of trees can form the basis of calculation of the premium under Crop Insurance.

Rating of premium of Crop Insurance.

In calculating the premium we shall take into account the following :—

- (a) Average yield per acre or per given area or number of trees and plants.

- (b) An average estimate of claim that is to be paid under Crop Insurance.
- (c) Cost of management inclusive of the cost of securing the business.
- (d) Interest on the capital invested in Crop Insurance together with cost of creating reserve for redemption fund.
- (e) Creation of Reserve Fund.

To meet the above requirements we think if premiums be calculated at the rate of $2\frac{1}{2}$ p.c. to 10 p.c. on the value of the agricultural produce the Scheme may be workable one. We can get the value of any agricultural produce from the average value of the same from 10 or 20 years. Now let us take a concrete case of jute. If the average yield be 1 crore Bales i.e. 5 crores mds. of jute and if the average price be Rs. 25 per bale we get annually jute crop worth about 25 crore rupees. If 5 p.c. be the premium of jute under Crop Insurance and if the whole jute crops can be insured we get a premium of 1,25,00,000 (1 crore and twenty-five lacs) quite an adequate premiums to meet claims for failure of crops, management and other cost. In the beginning it is advisable to keep the rate of premiums

higher which can be reduced on actual workings of the department. In the similar way if the whole agricultural produce which is roughly estimated at 1000 crores of rupees can be insured under Crop Insurance—we think at the rate of 5 or 6 p.c. India can get a premium of 50 to 60 crores annually under Crop Insurance.

Method of collecting premiums under Crop Insurance.

The branches of Crop Insurance should be started in the mufasil where crop is raised. If for the unit of a Branch, we take each village Union Board area, we can open an office for Crop Insurance in the same locality where there be a branch of the Agricultural Bank. It cannot be expected that the premium of crop can be paid in cash by the cultivator or by the estate owner. If an arrangement can be made with the Agricultural Bank to advance the premium on hypothecation of crop to the cultivator and if the premiums so realised is deposited in the Agricultural Bank each forming the counterpart of the other institution then there will be no difficulty in getting the premiums from the cultivators.

Cultivator's attraction to come under Crop Insurance.

As 'soon as the crop will be insured—the cultivators can get a certain portion of the value of the crop that will be raised in his land from the Agricultural Bank. If there be failure of crops the Agricultural Bank can get the advances along with interest from the crop insurance department and when the crop will be raised a further advance (inclusive of the previous advances) up to 75 p.c. of the market value of the agricultural produce insured under Fire Insurance can be allowed to the cultivator so as to afford him a staying power to dispose of his goods in better market. This method of financing will attract the cultivator for insuring his crop. And if we look into the heavy indebtedness of the agriculturists of the present day and the high rate of interest and other crude method of sale of the agricultural produce—we think the agriculturists will be immensely benefited by this way of financing from Agricultural Bank and insuring under Crop Insurance. The cultivators will consider Crop Insurance as a boon to them.

The number of persons that Crop Insurance and Agricultural Bank can employ :—

If 10 p.c. of the income under Crop Insurance and Agricultural Bank be allocated towards the

management cost and if the average salary be Rs. 25 or Rs. 30 a month, India can employ about 2 lacs middle class young men in the line.

Constitution of the Crop Insurance and Agricultural Bank.

There should be one provincial head with staff in each head quarter of a province under provincial Board and all the provincial heads will be under the control of the Chief Commissioner under the Central Board.

Capital of Crop Insurance.

We have discussed elsewhere that 5 crores capital for Crop Insurance and 15 crores capital of Agricultural Bank will serve the purpose of finance and insurance of crops in India.

CHAPTER XIV.

BANKS

Banking Institution in India.

Except money lending business, Banks in the higher sense have not developed in India. The money-lenders generally charge a very high rate of interest, so much so, that the indebtedness of the peasantry has increased like anything and hangs like Democles' sword over them. The Industries of India find it difficult to get proper finance, so they languish. Any Scheme of Industrialisation and development of agriculture presuppose the existence of proper Banks to finance them. While the European merchants get proper finance from the English Banks and even from the Imperial Bank, it is in a very rare case that the Indian business-men get such help from them. The result is stagnation of the Indian Industries and businesses. The inauguration of Reserve Bank in India may afford some facilities to the Indian Banking business but it is yet to be seen how far the Indian Industries and business-men will be profited by them. The first primary duty will be to start some Banks in India. Banking business falls generally in the four categories. Each type of Bank should be devoted to finance the particular business and not like present day Composite Bank carrying on every form of business.

I. Mortgage Debenture Bank.

In every agricultural country there are Mortgage Debenture Banks to finance the agriculturists. These Banks are started with some paid-up capital, invest the capital in the mortgage of landed properties on long term loan, realise the capital with interest by small instalments in course of 15, 20, 25, 30, 35, 40 years and in some cases 50 to 70 years and issue debenture of smaller denomination against the mortgage at a rate of interest $\frac{1}{2}$ to 1 p.c. lower than the interest charged on the mortgage. This difference of interest is appropriated towards the management cost of such Banks. When these debentures are sold in the market, the Bank again invest the amount so realised from the sale of debentures in mortgage of fresh properties—against which, fresh debentures are issued. In this way the mortgage Debenture Bank generally invest 20 times of their original capital. But in every place the Mortgage Debenture Banks adopt the following three principles :—

- (a) Except in Egypt where the margin is 75 p.c.—the capital is invested on 50 p.c. margin on the value of the properties.

- (b) The title of the property against which the money is advanced should be clear and marketable.
- (c) There are some Acts for speedy recovery of instalments in case of default and not the present cumbrous law for putting a mortgage property to sale.

The difficulties of formation of land mortgage Debenture Banks in India.

The conditions under which Land Banks in other agricultural countries prosper, do not exist in India ; it is doubtful whether this type of Bank can flourish in India. The greatest problem of Land Bank is to pay regularly the interest of the Debenture holders. But this payment depend upon the regular realisation of interest from the mortgage—which is a most uncertain factor in India. Because the value of the agricultural land depends upon the market value of the agricultural produce and the value of the agricultural produce depend upon the world market. If there be depression in the world market, as at present—there will be less demand of the agricultural produce of India. Besides the world market—there is a competition with the produce of the other countries.

So Land Banks as we find in the other country cannot prosper in India unless the following arrangements can be made—namely :—

- (a) The fixing up of a minimum price level to some staple produces in India.
- (b) Increased purchasing power of the Indian public through industrialisation.
- (c) Some other Scheme, preferably Insurance Scheme, where there is a perennial source of liquid cash money.
- (d) The debentures should be issued not on expectation of realisation of interest from the mortgagee, a most uncertain factor, but to the extent, the Insurance Department can meet the interest on the debentures issued.

If the above conditions do not prevail—we are afraid, the history of failures of Loan Companies in Bengal will be repeated in such Mortgage Debenture Banks. The Loan Companies whose number exceed more than 782 in Bengal used to invest their capital (excepting Jalpaiguri Banks which invested in Tea Industry) in long term loan on the mortgage of landed properties. But through the fall in the price of the agricultural produce for the

successive years the Loan Companies could not realise interest (far to speak of realising capital amount). So they could not pay the interest on the fixed deposit. Hence the crash came. The Loan Companies though they are not Mortgage Debenture Banks actually served the purpose of Land Banks as they got their assets invested in landed properties on long term loan ; the depositors in the Loan Companies though not the Debenture holders yet their money was invested in landed properties.

How Land Banks can prosper in India.

In absence of the arrangements as mentioned in clauses A & B in the above—the Land Banks if started with Life Insurance can develop in India. Because the Insurance Department will have surplus fund enough to pay regularly the interest on the Debentures if they are issued as per the capacity of the Insurance Department to meet the interest of the Debenture holders. The combination of Life Insurance with Land Banks is the only safety of such Bank ; otherwise such Banks will meet with failures.

Land Banks are just like Loan Companies in Bengal.

The Loan Companies in Bengal were working with a small paid-up capital varying from Rs. 10,000 to 1 Lac Rupees and often they get

deposit of 50 to 60 Lacs of Rupees on which they have to pay regularly interest. These Loan Companies generally invest their funds in mortgage of landed properties. Similar is the condition of Land Mortgage Debenture Bank. Supposing a Land Bank is started with 10 lacs capital. It will invest the fund in mortgage of landed properties valued not less than 20 lacs on a long term loan—say for 25³ years—the interest and part of the capital is to be paid regularly in every year. Against this Mortgage-Debentures is issued say for Rs. 100 in the market repayable in 25 years i.e. as the mortgage loan—but the interest on the debentures are to be paid regularly, say, half-yearly for 25 years. The money realised through Debentures are again invested in landed properties and in this way Debentures are issued 20 times the original capital. In France only as soon as part of the capital is realised they distribute amongst the Debenture holders by lottery.

But the regular payment of interest to Debenture holders depends on regular payment of interest by the borrower—just as we find the regular payment of interest of the depositors in Loan Companies depend upon the realisation of the interest from the mortgagee.

Bengal Government's Move.

We note with great satisfaction that His Excellency Sir John Anderson, the Governor of Bengal has set up a Committee to enquire amongst other matters into the possibility of starting Land Banks in Bengal and that already steps have been taken to start 3 or 4 Land Banks in Bengal. If the payment of interest of Debenture holder form a charge on the revenue of the province—then the difficulty as stated above is avoided. But the question is—can the Land Banks be successful in Bengal without Government meeting the interests, and unless we can place such Banks on their own legs—the development of Land Banks in Bengal as well as in other parts of India will be greatly hampered. And there is no possibility of success of such Banks unless they are run as part and parcel of Insurance Company.

Agricultural Bank.

While the Land Mortgage Debenture Bank allows long term loan to the agriculturists and other landed proprietors against the security of real properties—the Agricultural Bank will advance loan on hypothecation of agricultural produce which loan with interest will be realised in the course of

the year. The Debenture holders like depositors supply fresh capital to the Land Banks whereas the Crop Insurance Company will supply fresh capital to the Agricultural Bank. They may also take deposit from the agriculturists. In this way Agricultural Bank and Crop Insurance Company can develop and they will be able to furnish more authentic survey of cultivated land, the area under crop, the actual yield of any particular crop and the local market prices ; so the present crude method can be avoided by the Government.

If our proposal of fixing up of minimum price to some staple agricultural produce is accepted by the Government—the money that can be spent by the Government towards that purpose can be done through the Agricultural Bank office in the mufassil. For example if it is decided by the Government to fix the minimum price of jute at Rs. five per md. and if the whole stock of jute stock cannot be disposed of—the Government has to finance the product till they are disposed of. In the above way Agricultural Bank in India will give tremendous facilities to the agricultural produce and there will not be necessity of any Committee to devise means for liquidation of heavy rural indebtedness. Without the aforesaid methods—if

it can be presumed that the present indebtedness of the agriculturists can be wiped of—they will again incur debt within a short time.

Industrial Bank.

Everybody who is connected with any industry in India knows that to get finance at a cheap rate of interest and in time is almost a difficult problem. No industry can stand without financial backing. The Indian Loan and Banking concerns generally fight shy of investment in industries. Indian industries are at present fighting against odd. They cannot compete with foreign industries with better organisation for sale and with better facilities from the Banks. The cause of this deplorable state of affairs is that there is no Bank in India specially run to finance the industries of the country.

This is the present position and if the industries as proposed to be started under Ten Year Plan are undertaken, timely accommodation from the Industrial Bank will be felt a necessity. Just as it is impossible to conceive of the development of export trade of India without the national mercantile marine so it is impossible to conceive of the development of the industries in India without

starting Industrial Bank to finance the industries. If the proposals under Ten Year Plan are accepted—such Industrial Bank will handle finance more than 200 to 500 crores of Rupees a year, and as such the financial position of Industrial Bank will be much better than that of the present Imperial Bank which handled 76 crores 60 Lacs in 1930 as against 67 crores 52 Lacs of Indian Joint-stock Banks.

Commercial Bank.

It is very disappointing to note that India whose trade figure in normal years is about Rs. 565 crores has not got any Exchange Bank. All the export and import of India is carried on by the foreign Banks.

So an Exchange Bank is not only a necessity for the present trade but for the future increased trade of India.

In conclusion we give below the deposit figures of India in Banks in comparison with the deposit figures of other advanced countries showing the backwardness of our people regarding banking :—

Deposit per head
of people.

United States of

America	..	£87
England ..	..	£60
Canada ..	..	£50
Japan ..	..	£14
India ..	..	—6 shilling

Number of Bank per 10 Lacs people—

England ..	..	285
U. S. A. ..	..	256
Canada ..	..	448
Japan ..	..	92
India ..	..	2

